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STAY OR LEAVE?

Veteran teachers' relationships with students and job satisfaction

I E T J E V E L D M A N



Stellingen

Stay or leave? Veteran teachers' relationships with students and job satisfaction

Ietje Veldman, 27 September 2017

1. Er moet meer aandacht zijn voor de intrinsieke oorzaken van verminderde arbeidstevredenheid van oudere leraren, zoals de oorspronkelijk motivatie om voor het beroep te kiezen, dan voor de extrinsieke oorzaken. (dit proefschrift)
2. De kwaliteit van de relatie tussen de oudere leraar en zijn/haar leerlingen is onderbelicht in het debat over afnemende arbeidstevredenheid. (dit proefschrift)
3. Het loont om rekening te houden met verschillen in de ambities van oudere leraren ten aanzien van hun relatie met leerlingen. (dit proefschrift)
4. Aandacht voor tevreden oudere leraren die de kwaliteit van hun relatie met leerlingen overschatten is van belang, met name voor het welbevinden van de leerlingen. (dit proefschrift)
5. Vanuit het oogpunt van preventie van vermindering van arbeidstevredenheid, zouden tevreden oudere leraren, die de kwaliteit van hun relatie met leerlingen onderschatten, gesteund moeten worden om hun zelfbeeld realistischer te maken. (dit proefschrift)
6. Er zou in het debat over lerarentekorten meer aandacht moeten zijn voor de begeleiding van oudere leraren, om ze langer voor het beroep te behouden
7. Gezien het maatschappelijk belang van voldoende goed opgeleide leraren en het feit dat lerarenopleidingen veelal kleine opleidingen zijn, is het onbegrijpelijk dat de meeste lerarenopleidingen nog steeds onder het laagste bekostigingstarief van de overheid vallen.
8. Samenwerking tussen hogescholen en universiteiten bij het vormgeven van een universitaire pabo, waarbij de specifieke expertise van beide instellingen wordt gecombineerd, zou niet bedreigd moeten worden door het aanbieden van een universitaire pabo door universiteiten alleen.
9. Het toetsen van de kennisbasis bij studenten van de tweedegraads lerarenopleidingen is een taak van de instellingen, en zou dus door de instellingen zelf moeten worden geregeld.
10. Leraren zijn ook maar mensen.

STAY OR LEAVE?

Veteran teachers' relationships with students and job satisfaction

I E T J E V E L D M A N

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Stay or leave?

Veteran teachers' relationships
with students and job satisfaction

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CHAPTER 1

I n t r o d u c t i o n

Not all teachers manage to stay satisfied with their job towards the end of their career. To end their career with negative feelings about their job can be a personal drama for teachers, but also for schools dissatisfied teachers can be problematic, because of the chance on a deteriorating atmosphere in and beyond the classroom. Furthermore, if veteran teachers are dissatisfied with their job, they may leave the profession before retirement age which contributes to the impending teacher shortages in many Western countries (OECD, 2005, 2012).

One reason for low job satisfaction is that many teachers experience teaching as stressful (Johnson, 2005). This may result in absenteeism, burnout, leaving the profession (Betoret, 2006; Greenglass & Burke, 2003). Common sources for teachers' work stress are work overload, low job status, demands of school administrators (Day, 2006), and poor relationships with students and disruptive student behavior (Spilt, Koomen & Thijs, 2011). Indeed, disruptive student behavior is not only a major cause of teacher attrition in the early career (e.g., Stokking, Leenders, de Jong, & van Tartwijk, 2003), but it is also a cause of work stress and burnout later in the career (Betoret & Artiga, 2010). On the other hand, the relationship with students is an important motivation to become a teacher and to stay in the profession (Sinclair, Dowson & Mcinerney, 2006) and good relationships with students are positively related to job satisfaction (Grayson & Alvarez, 2008).

Teachers' relationships with students and their association with teacher job satisfaction have been underinvestigated (Spilt et al., 2011). More knowledge of the association between veteran teachers' job satisfaction and their relationships with students is needed to gain a better understanding of causes of veteran teachers' satisfaction with the profession and, ultimately, veteran teacher retention. In the current dissertation we investigated this association. The overarching question this dissertation addresses is: How is veteran teachers' job satisfaction associated with the different aspects of their relationships with students?

1. Veteran teachers' job satisfaction

Job satisfaction can be defined as "a pleasurable condition of a positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p.1300). There are many sources for veteran teachers' job satisfaction, intrinsic as well as extrinsic (Dinham and Scott, 1998). Teachers' positive job satisfaction has often been associated with intrinsic factors of job satisfaction, (Hargreaves, 2005; Day et al., 2007), while teachers' dissatisfaction has often been associated with extrinsic factors.

Intrinsic factors include motivation for and commitment to the teaching profession (Day et al., 2006), inspired by the actual work of teaching: working with students and seeing students learn and develop (Scott, Stone, & Dinham, 2001). Many studies of (veteran) teachers' job satisfaction connect job satisfaction and teacher stress with teachers' relationships with students, student misbehavior, and problems with classroom management (Byrne, 1999; Chang, 2009; Friedman & Lotan, 1985).

The extrinsic factors include externally imposed educational change and external evaluation of schools, negative portrayal of teachers in the media, and private circumstances (Dinham et al., 1998; Day, et al. 2006; Hargreaves, 2005).

Some researchers (Day et al., 2006; Hargreaves, 2005) have identified different groups of veteran teachers. Day et al. (2006) distinguished between veteran teachers on the basis of their degree of commitment and level of motivation for their profession; Hargreaves (2005) focussed on how veteran teachers responded to educational changes. Based on the work of Huberman (1993), Hargreaves distinguished four groups of veteran teachers. Two of these groups' job satisfaction was relatively high compared with the other two groups. The two groups with relatively high job satisfaction differed in the degree to which they found their challenges in and beyond the classroom; but both groups derived their satisfaction from experiences with their students in the classroom. One of the groups of dissatisfied teachers put their own interests above those of the students. The other group consisted of teachers who reported disappointment about reforms adopted in the past and later rejected.

Day et al. (2006) distinguished two groups of veteran teachers (over 31 years of experience). The group of satisfied veteran teachers referred to intrinsic factors, such as the rewards they got from good student results and positive relationships with students; the group of unsatisfied teachers referred to extrinsic factors, such as government measures, private circumstances, the paperwork burden, workload, and long working hours. Veteran teachers' relationships with students were an important intrinsic factor for their job satisfaction.

2. Veteran teachers' relationships with students

We investigated veteran teachers' relationships with students using interpersonal theory. Interpersonal theory (Horowitz & Strack, 2011) provides a framework for describing interpersonal relationships and processes. According to this theory, two independent dimensions, which have consistently been found in research, are both necessary and sufficient to describe interpersonal behavior and relationships (Horowitz & Strack, 2011; Kiesler, 1983). These dimensions are referred to as the agency and communion (Fournier, Moskowitz, & Zuroff, 2011). The agency dimension concerns social influence and control, and ranges from dominance to submissiveness. The communion dimension concerns affiliation and warmth, and ranges from agreeable to quarrelsome. These two independent dimensions can be depicted as an x-axis and a y-axis in a two-dimensional space. Wiggins (1979) describes a point in this space as visualizing a weighted combination of the levels of agency and communion. This space is often depicted as a circle, referred to as the interpersonal circle (IPC). Along this circle, various prototypical interpersonal behaviors are commonly plotted according to their specific blends of agency and communion. Directing, for example, is plotted in Figure 1.1 on the upper right hand side of the circle, which reflects high agency and moderately high commu-

nion. Uncertain behavior, on the other hand, can be described as conveying low levels of agency and moderately low levels of communion. Wubbels, Créton, and Hooymayers (1985) adapted the IPC to the classroom context and used it to describe interpersonal teacher behavior¹ (cf. Wubbels, Brekelmans, Den Brok, & Van Tartwijk, 2006). In the IPC for the teacher (IPC-T), agency and communion underlie eight prototypical interpersonal behaviors teachers may convey in class (being directing, helpful, understanding, and so on; see Figure 1.1). Based on the IPC-T, Wubbels and his colleagues (Wubbels, Créton, and Hooymayers 1992), Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006) developed the Questionnaire on Teacher Interaction (QTI) to map perceptions of teachers' interpersonal behavior, and teacher agency and communion in particular. The QTI can be used to map students' perceptions and teacher's self- and ideal perceptions of teacher interpersonal behavior in class, which are indicative of the relationship of the teacher with that class. In our studies we used the QTI frequently, to measure different aspects of veteran teachers' relationships of students.

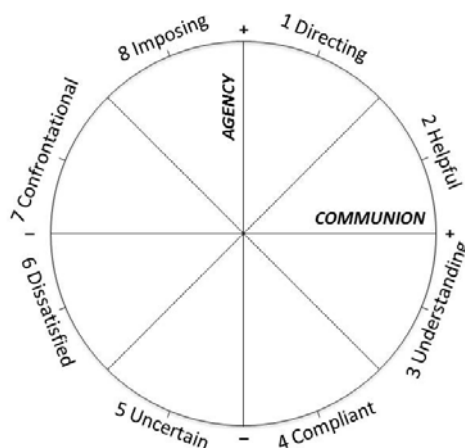


Fig.1.1 The Interpersonal Circle for the Teacher (cf. Wubbels, Brekelmans, Den Brok, & Van Tartwijk, 2006; Wubbels, Brekelmans, den Brok, Levy, Mainhard & van Tartwijk, 2012)

1 The IPC-T was formerly referred to as Model Interpersonal Teacher Behaviour (MITB, Wubbels et al., 2006). In the MITB, agency was referred to as influence or control; communion was referred to as proximity or affiliation. The terminology was changed in line with developments in interpersonal psychology (Horowitz & Strack, 2011).

3. The current dissertation

To investigate the overarching question ‘How is veteran teachers’ job satisfaction associated with the different aspects of their relationships with students?’, this dissertation builds on former research into teachers’ job satisfaction and teachers’ relationships with students. We conducted four empirical studies. Each study focused on different aspects of veteran teachers’ job satisfaction and teacher-student relationships.

The first study, described in chapter 2 of this dissertation, focused on the experiences of four satisfied veteran teachers. The research question was: “How was the teacher-student relationship related to job satisfaction during the careers of four teachers who managed to maintain high job satisfaction until the end of their careers?” We were especially interested in the ways in which their job satisfaction and their relationships with students changed during their teaching careers, from both the veteran teachers’ and the students’ perspective. We used QTI data of veteran secondary school teachers, collected at various points in their careers. Teachers were 54 years or older and had been teaching for more than 25 years. We combined questionnaire data with interviews.

Besides using student perceptions of these teachers’ interpersonal behavior, originating from different points in the teachers’ careers, we interviewed the teachers using the narrative-biographical method (Kelchtermans, 1993). Taking our findings for these four teachers together, we found a positive relation between their job satisfaction and the self-reported quality of teacher-student relationships at the start of the career; for three of the four teachers, we also found that relation at the end of the career. But we also found that a satisfied teacher’s positive perceptions of the teacher-student relationship can differ from the students’ perceptions of the same relationship.

The findings of our first study stimulated us to look at veteran teachers’ aspirations in their relationships with their students (i.e., what kind of relationships do they want to realize?), the extent to which they realized these interpersonal aspirations or goals, and the extent to which they believed they were capable of realizing their aspirations in their teacher-student relationships (i.e., their interpersonal self-efficacy). Our research question in the second study was: “How do veteran teachers’ aspirations, their realized aspirations, and their self-efficacy with respect to their relationships with their students relate to their job satisfaction?” We used the Job Demands model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) to explore veteran teachers’ aspirations (personal demands), their realized aspirations, and their interpersonal self-efficacy (personal resources) with respect to their relationships with students. We used QTI data of veteran secondary school teachers who were 54 years or older and had been teaching for more than 25 years. We used interview data in combination with the results from the QTI and the Teachers’ Sense of efficacy scale (TSES) (Tschannen-Moran and Woolfolk Hoy, 2001), and distinguished four different groups of veteran teachers on the basis of degree of job satisfaction and degree of realized aspirations in their teacher-student relationships.

Having found a discrepancy in the second study between the results from the TSES (Tschannen-Moran and Woolfolk Hoy, 2001) and the degree of self-reported interper-

sonal self-efficacy in the interviews, we decided to construct a questionnaire for measuring interpersonal self-efficacy directly, derived from the IPC-T and the QTI. Our research questions in study three were: 1) “To what extent is teachers’ interpersonal self-efficacy related to their realized aspirations in their relationships with their students?”, 2) “To what extent is teachers’ interpersonal self-efficacy related to their self-efficacy with respect to classroom management, classroom discipline control, and classroom consideration?” and 3) “To what extent do younger teachers and veteran teachers report lower interpersonal self-efficacy, compared with teachers in mid-career?”

In chapter 4 we describe the process of constructing and validating this new Questionnaire on teachers’ Interpersonal Self-Efficacy (QTI-SE). For this study we requested the collaboration of fifteen school boards of professional development schools in the western part of the Netherlands.

In study four, we aimed to understand how veteran teachers’ interpersonal aspirations, their realized aspirations, and the interpersonal perceptions of their students combine with their job satisfaction. Such a typology of veteran teachers might help in adapting coaching to different types of teachers to keep them satisfied in the teaching profession. The research question was: “What types of veteran teachers can be distinguished based on their realized interpersonal aspirations with students, the accuracy of their self-perceptions of their interpersonal relationships with students, and their satisfaction with the nature of their work?” We built the distinction on the degree to which veteran teachers realized their aspirations in their relationships with students, on the degree to which their self-perceptions of these relationships coincided with the students’ perceptions, and on their job satisfaction. We elaborated on the resulting types using other relevant variables such as veteran teachers’ interpersonal aspirations and self-perceptions, interpersonal self-efficacy, and the extent of their teaching tasks.

Finally, in chapter six, we summarize the findings of studies presented in the current dissertation and relate these to the literature in this domain. We formulate implications for practice and make suggestions for future research.

CHAPTER 2

Job satisfaction and teacher-student relationships
across the teaching career: four case studies²

ABSTRACT

We investigated the development of teacher-student relationships and teachers' job satisfaction throughout the careers of four veteran teachers who retained high job satisfaction. Teacher data gathered using the narrative-biographical method were compared with students' perceptions of the teacher-student relationships, using the Questionnaire on Teacher Interaction. Teachers' job satisfaction appeared to be positively related to the self-reported quality of the teacher-student relationships. Positive retrospective teacher perceptions did not always coincide with positive student perceptions. It appeared that teachers may have positive job satisfaction despite a poor teacher-student relationship in the eyes of the students.

1. INTRODUCTION

It is important to find out more about how veteran teachers stay satisfied in the profession because the chances of veteran teachers leaving the profession before retirement age are probably larger when they are less satisfied. With the impending teacher shortages, therefore, dissatisfaction of teachers with their job can become a major problem. Several sources (Betoret, 2006; Chang, 2009; Jepson & Forrest, 2006; Klassen & Chui, 2010; Kyriacou, 2001; Spilt, Koomen, & Thijs, 2011) have shown that teacher-student relationships are very important for teachers' job satisfaction. Analysis of the teacher-student relationships of successful veteran teachers may provide clues for policies to keep veteran teachers in the profession longer.

In many Western countries, teachers in secondary education tend to leave the profession before the official retirement age (OECD, 2005, 2012). On top of that, the current teacher population is ageing (OECD, 2005, 2012). In most OECD countries the majority of secondary teachers is over 40 years of age. This is alarming for a number of reasons, but especially because of the impending teacher shortages. In 1990s, Macdonald (1999) reviewed the literature on teacher attrition, which she defined as teachers leaving the profession prematurely and voluntarily. Her review indicated that in most countries teacher attrition rates were between 5% and 30%. More recent studies (Borman & Dowling, 2008; Guarino, Santibanez, & Daley, 2006) have revealed that in the US the attrition rate was 12% in the 1980s and that it increased to 16.5% in 2004 - 2005. One stable finding in these studies is that attrition is very high for young, new teachers and lower for older, more experienced teachers.

2 This chapter is based on Veldman, I., Van Tartwijk, J., Brekelmans, M., and Wubbels, T. (2013). Job satisfaction and teacher-student relationships across the teaching career: Four case studies. *Teaching and Teacher Education*, 32, 55-65.

However, when teachers reach an age at which retirement is feasible, the majority will do so as early as possible (EACEA, 2012). Based on an analysis of national data from the Current Population Survey, Borman and Dowling (2008) indicate that teacher attrition is relatively high among older teachers, reflecting the fact that they retire considerably earlier than other professionals. In some European countries, such as Germany, Austria, Italy, and the Netherlands, teacher retirement is expected to cause serious teacher shortages in the near future, because the age groups closest to retirement are overrepresented in the teacher population (OECD, 2005, 2012). In the Netherlands, for instance, nearly 70% of secondary school teachers could leave the profession in the next 10 years (CBS, 2007; OCW, 2010).

In the literature, more attention has been given to the attrition of new, young teachers (e.g., Darling-Hammond, 2003; Ingersoll & Smith, 2003; Yost, 2006) than to teachers who leave the profession in the last ten years before retirement age. Many research studies of teacher retention focus on attrition, the external result of loss of commitment, instead of on why commitment is diminishing (Day & Gu, 2009). This is unfortunate, because insight into factors that are important for keeping teachers healthy, motivated, and satisfied in the final stages of their careers might inform policies aimed at keeping them in the job longer. Investigating the development of the teaching career and finding out if there are typical trajectories that result in teachers staying satisfied until the end of their careers is essential for informing such policies.

1.1 Teaching careers

Based on the work of Huberman (1993), Hargreaves (2005) distinguishes four types of teachers according to dominant career trajectories in the later years of the teaching career among Canadian elementary, middle, and high school teachers: (1) the teachers who are able to keep finding challenges beyond and within their classrooms, (2) the positive focusers, (3) the negative focusers, and (4) the disenchanted. The positive focusers concentrate their efforts in the small world of their own classrooms, where they can pass their wisdom on to young people in the autumn of their careers. In contrast, the negative focusers have always managed to protect their own interests rather the interests of the students. In their later careers, they try and find ways to get the easiest timetables and classes. Finally, the disenchanted typically committed themselves to educational reforms earlier in their careers, which were later rejected. As a consequence, they have lost their ideals and motivation and often feel nostalgic. Most teachers were found to be in one of the last three trajectories during their careers. Thus, Hargreaves (2005) found two groups who stayed satisfied and motivated, and two groups who did not. In their *Vitae* study, Day and his colleagues (Day & Gu, 2010; Day et al., 2006) explored variations in teachers' lives, work, and effectiveness in different phases of their careers. This research involved a nationally representative sample of 300 primary and secondary teachers working in 100 schools in Great Britain. Day and his colleagues distinguished two groups within this population of teachers who had had very long teaching careers

(over 31 years): a group of teachers who kept up their motivation for and stayed satisfied with the teaching profession, and a group of teachers who were tired and had lost their motivation. The Vitae findings show that the teachers from the last group often referred to government measures, private circumstances (such as bad health), the massive paperwork burden, workload, and long working hours as causes of their poor job satisfaction. According to the teachers who managed to retain their motivation and stay satisfied in the profession, this was related to the rewards they got from good student results and good teacher-student relationships. New research (Day & Gu, 2009) confirms these findings. A study in Israel among eight successful veteran biology teachers (Eilam, 2009) revealed the importance of enthusiasm for teaching and accountability for students' learning. Three types of strategies for surviving in the changing educational system were distinguished: adaptation to changes by transforming to suit the new circumstances; building a new niche in the changing environment, thereby avoiding having to transform; and moving into new education-related roles. Cohen (2009) points to the role of the matching of the idiosyncratic needs and personalities of the successful veteran teachers with the culture of teaching. The two inner-city teachers in the US in her study both possessed a kind of hardiness and narcissism that protected them from psychic assaults.

1.2 Job satisfaction and burnout

The literature summarized above highlights the importance of teachers' job satisfaction in preventing burnout and teacher attrition. Locke (1976, p.1300.) defines job satisfaction as "a pleasurable condition of a positive emotional state resulting from the appraisal of one's job or job experiences". Job satisfaction is the result of a personal assessment of work and work experiences. Van der Ploeg and Scholte (2003) distinguish five basic aspects of job satisfaction: management support, autonomy, relations with colleagues, nature of work, and working conditions. They used the job satisfaction index (ASI) to gather data on each of these aspects. When job satisfaction declines, phenomena such as work-related stress and burnout can become manifest. While work-related stress is usually temporary, burnout refers to a more chronic disturbance. Burnout is a condition in which individuals are drained of physical and mental energy because of an exaggerated effort to realize unrealistic expectations set either by themselves or by their superiors, or because of a desire to act in accordance with social norms at a time when the needs of the self are not being met (Freudenberger, 1974). Maslach (1976), Maslach and Leiter (1997), Maslach, Schaufeli, and Leiter (2001) distinguish three aspects in this regard: emotional exhaustion, depersonalization, and personal accomplishments. Emotional exhaustion refers to depletion of an individual's emotional resources and the feeling that the person no longer has anything to give psychologically. Depersonalization is the development of indifferent and negative attitudes towards others. Personal accomplishments refer to the individual's perception of the effectiveness of his or her work. Friedman and Farber (1992) found that teachers often report that they are exhausted,

but are nevertheless satisfied with teaching and would choose the same profession if they had to start again. It seems to be important to use both job satisfaction and burnout as concepts when investigating the well-being of teachers.

Teaching is one of the most stressful professions. One quarter of teachers report that teaching is a very stressful job (Johnson et al., 2005; Kyriacou, 2001). Organizational and social factors, such as lack of support, workload, and classroom management issues, are important causes of teachers' stress. In a study of the relation between teachers' self-efficacy and job satisfaction among 1,430 practicing teachers, Klassen and Chui (2010) found a direct relation between teachers' self-efficacy for classroom management and instructional strategies, and job satisfaction. Teachers with high levels of stress from workload and student misbehavior have more health and vocational problems, such as burnout, absenteeism, and retention (Betoret, 2006; Jepson & Forrest, 2006; Kyriacou, 2001). Chang (2009) and Spilt et al. (2011) indicate that the primary explanation for the high stress in the teaching profession is the emotional involvement of teachers with their students. They observe that organizational and social pressures, such as administration workload and classroom management issues, and the lack of supervision and team support have been extensively investigated, but that interpersonal relationships between teachers and students have been largely ignored as a factor of significance to teachers' job satisfaction.

1.3 Teacher-student relationships

There is consensus among researchers (e.g., Chang, 2009; Friedman, 2006; Spilt et al., 2011) that teacher work stress most commonly stems from individual relationships with students. According to Friedman (2006), personal involvement, altruistic care, and exercising authority and control characterize positive relationships with students. Hargreaves (2000) observes that secondary teachers' positive emotions come from acknowledgement, respect, appreciation, and gratitude from their students. Lortie (1975), too, notes the importance of establishing meaningful personal relationships with students. He found that these relationships gave teachers even greater rewards and personal satisfaction than controlling the students. Friedman (2006) presents teachers' expectations of their work in a model, comprising "giving" (teaching, caring, friendship) at one end, and "receiving" (respect and appreciation) at the other. He argues that a major cause of teacher work stress and burnout is unrealized aspirations in relation to giving and receiving. Negative relationships with students are often related to problems with classroom management (Wubbels, Brekelmans, den Brok, & van Tartwijk, 2006), which are not only the most important reason for teacher attrition early in the career (Ingersoll & Smith, 2003; Macdonald, 1999; Spilt et al., 2011), but also an important factor in teacher stress and burnout later in the career (Byrne, 1999; Friedman & Lotan, 1985; Tatar & Horenczyk, 2003). Many experienced and inexperienced teachers experience problems in this

domain (Evertson & Weinstein, 2006; Veenman, 1984). According to Byrne (1999) and Chang (2009), teachers become emotionally exhausted and develop negative attitudes to their students and the teaching profession when their classroom climate deteriorates. These findings are backed up by the research of Grayson and Alvarez (2008). They found that teachers who succeeded in keeping a positive relationship with their students were also more likely to remain motivated and enthusiastic, and to enjoy their work.

1.4 Investigating teacher-student relationships

According to Wubbels et al. (2006), teacher-student relationships are reflected in patterns in the interpersonal behavior of the teacher. Research in psychology has shown that two independent dimensions are sufficient to describe perceptions of the interpersonal meaning of behavior (Fiske, Cuddy, & Glick, 2007; Judd, James-Hawkins, Yzerbyt, & Kashima, 2005). In psychological research on interpersonal relationships, the terms ‘agency’ and ‘communion’ have been widely used as labels for these dimensions (e.g., Kiesler, 1983; Tiedens & Jimenez, 2003). Applied to the classroom setting, ‘agency’ would describe the degree of influence the teacher has over what goes on in the classroom and ‘communion’ would describe the degree to which teacher and students interact in harmony or disharmony. Because the interpersonal meaning of any instance of behavior can be described by its position on these two dimensions, this interpersonal meaning of behavior can be represented graphically by its position in an orthogonal coordinate system. This space is often depicted as a circle, which is referred to as the interpersonal circle (IPC). The agency dimension is represented by the y-axis and the communion dimension by the x-axis. These two dimensions underlie eight types of interpersonal teacher behavior, which we refer to as: Directing, Helpful, Understanding, Compliant, Uncertain, Dissatisfied, Confrontational, and Imposing. These typical interpersonal behaviors can be plotted along an imaginary circle in the system of axes, according to the typical combination of agency and communion they imply (see Fig. 2.1). Directing behavior, for instance, implies agency and communion, but agency is higher than communion. Helpful behavior also implies agency and communion, but now communion is higher than agency (Wubbels et al., 2012).

Wubbels et al. (2006) developed the Questionnaire on Teacher Interaction (QTI) to gather data on students’ perceptions of patterns in teachers’ interpersonal behavior in their communication with students in a particular class. The original Dutch version consists of 77 items. Typical items are, for instance, “This teacher is friendly” and “This teacher is strict”. Answers are given on a 5- point Likert scale ranging from never/not at all to always/very. The items are divided into eight scales corresponding with the eight types of interpersonal teacher behavior. Each completed questionnaire yields a set of eight scale scores. The scale scores of students in the same class can be aggregated to a class mean per scale. The QTI was originally developed in the Netherlands (Wubbels et al., 2006), but has been translated, revised, and administered in more than fifteen countries, including China (Wei, Den Brok, & Zhou, 2009) and the United States (Wubbels &

Levy, 1991). Research into the reliability and validity of the QTI has included Dutch (e.g., Brekelmans, Wubbels, & Creton, 1990; Den Brok et al., 2003), American (Wubbels & Levy, 1991), and Australian (Den Brok et al., 2003) studies. A cross-national validity study was completed comparing the questionnaire in Singapore, Brunei, the US, the Netherlands, Slovakia, and Australia (Den Brok et al., 2003). In all these studies, both reliability and validity were found to be satisfactory.

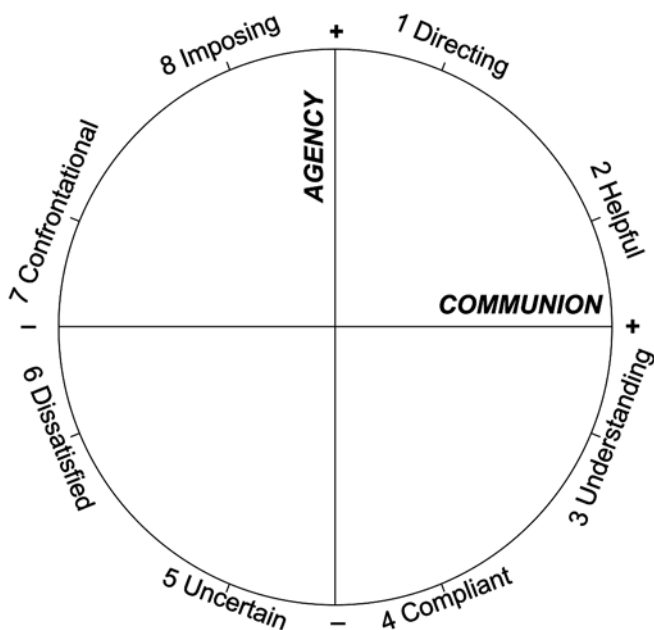


Fig. 2.1 The Interpersonal Circle for the Teacher (cf. Wubbels, et al., 2006; Wubbels et al., 2012)

Note 2.1.: Dimension scores are computed as follows from scale scores:

$$\begin{aligned} \text{agency} &= + (.92 * \text{directing}) + (.38 * \text{helpful}) - (.38 * \text{understanding}) - (.92 * \text{compliant}) \\ &- (.92 * \text{uncertain}) - (.38 * \text{dissatisfied}) + (.38 * \text{confrontational}) + (.92 * \text{imposing}) \\ \text{communion} &= + (.38 * \text{directing}) + (.92 * \text{helpful}) + (.92 * \text{understanding}) + (.38 * \text{compliant}) \\ &- (.38 * \text{uncertain}) - (.92 * \text{dissatisfied}) - (.92 * \text{confrontational}) - (.38 * \text{imposing}) \end{aligned}$$

The QTI results can be presented graphically, by shading the part of the model that corresponds to the scale score (cf. the graphs in Fig. 2.2). These graphs have turned out to be very useful for providing feedback to teachers, but for most research analyses, use of the two dimension scores has advantages over the eight scales (Wubbels et al., 2012). Dimension scores can be obtained from scale scores using the formula given in note 2.1.

Using cluster analyses of students' ratings, eight different profiles were distinguished in Dutch and American classes (Brekelmans, Levy, & Rodriquez, 1993). A profile is a particular combination of the eight scale scores resulting from the QTI. These profiles have

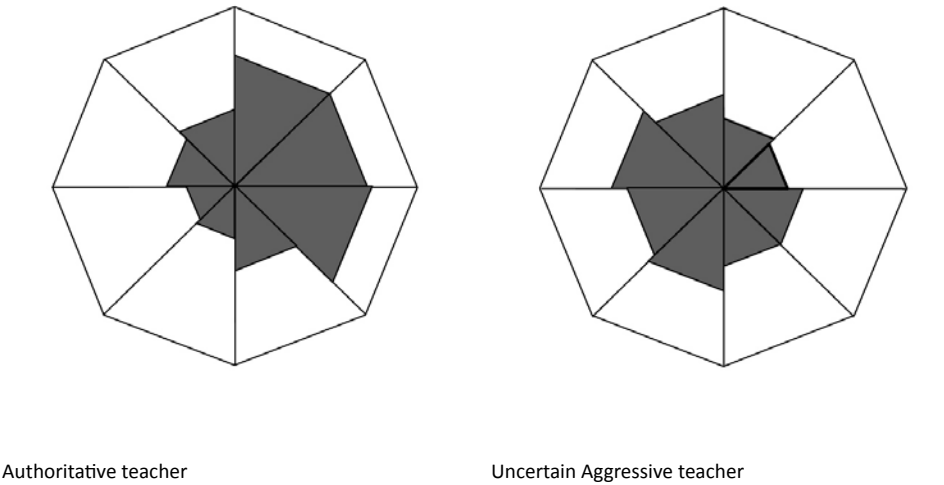


Fig. 2.2 QTI results displayed graphically for an authoritative teacher and an uncertain-aggressive teacher (Wubbels et al., 2006).

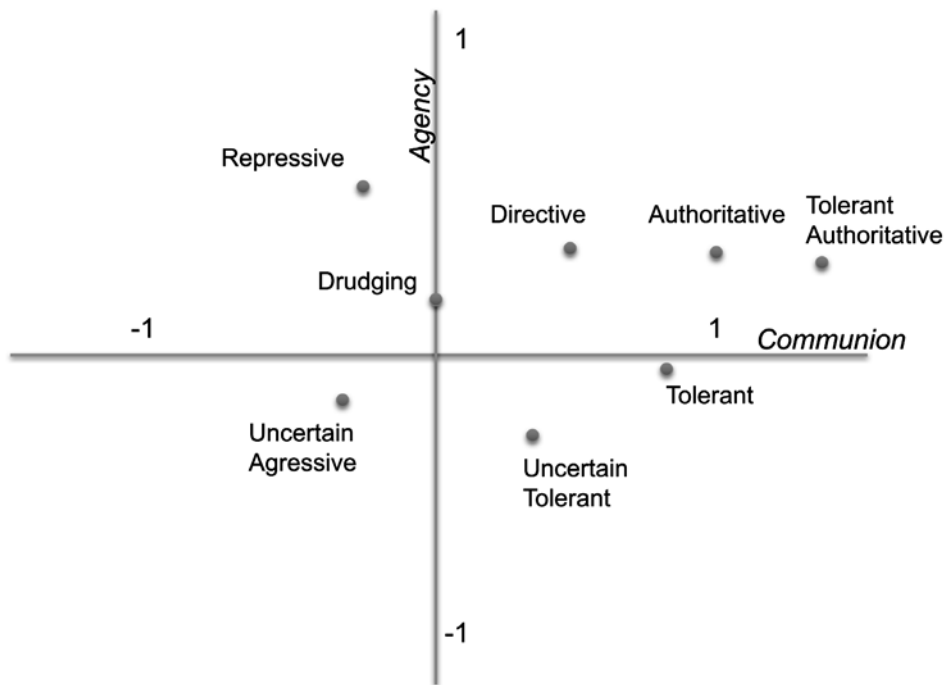


Fig. 2.3 The eight typical teacher interpersonal styles of Dutch teachers with their students, depicted according to their position on the agency and communion dimensions (Wubbels et al., 2006).

been named directive, authoritative, tolerant-authoritative, tolerant, uncertain-tolerant, uncertain-aggressive, repressive, and drudging (see Fig. 2.2 for the authoritative and uncertain-aggressive profiles). Although the profiles of most teachers' interpersonal behavior resemble one of these typical profiles, there are of course exceptions. In Fig. 2.3 the eight profiles are summarized as points on the coordinate system with the agency dimension as the y-axis and the communion dimension as the x-axis. Wubbels et al. (2006) report that both teachers and students usually prefer profiles that combine high teacher agency and teacher-student communion: tolerant-authoritative, authoritative, and directive. Compared with other teachers, teachers with such profiles have a positive working atmosphere in their classroom, and their students achieve relatively high scores on standardized tests and have relatively high motivation for the subject and the lessons (Brekelmans et al., 1993; Wubbels et al., 2006). The difference between these three profiles lies primarily in the level of communion in teachers' relationships with their students. Brekelmans, Wubbels, and van Tartwijk (2005) used cross-sectional and longitudinal data on the teacher agency and communion of over 600 teachers with 1-36 years of experience to investigate the teachers' development throughout their careers. Their results show that on average teacher agency increases considerably in the first years of teaching and then stabilizes. In general, the level of communion remains stable during most of the career, but tends to decline somewhat for very experienced teachers. If the quality of the relationship is crucial for job satisfaction, a growing distance between the teacher and students is, of course, risky.

The aim of the current study was to contribute to the knowledge base on teacher job satisfaction and teacher-student relationships by answering the following research question: How were teacher-student relationships related to job satisfaction during the careers of four teachers who managed to maintain high job satisfaction until the end of their careers?

2. METHODS

To answer this research question, we carried out four case studies. In each case, we investigated the career of a teacher who managed to retain high job satisfaction at the end of his or her career. We focused on the relationships these teachers had with their students throughout their careers.

2.1 Instruments

For the selection of participants (see next section) we used the Job Satisfaction Index (Van der Ploeg & Scholte, 2003) and the Maslach Burnout Inventory (Schaufeli & Buunk, 2004; Schaufeli & van Dierendonck, 1995). Only teachers with a high level of job satisfaction and a low burnout rate were selected. We interviewed the teachers using the narrative-biographical method (Kelchtermans, 1993), including the story-line method,

and combined the interview data with the results of the QTI. We clarify the use of these instruments below.

2.2 Sample

To select teachers for these case studies we followed a two-step procedure. First we used a pool of Dutch teachers who had participated in earlier research on the development of teacher-student interpersonal relationships during their careers (Brekelmans et al., 2005). Data on these teachers' interpersonal behavior had been gathered in their classes using the QTI among approximately 600 teachers and more than 25.000 students, in about 100 different secondary schools throughout the Netherlands. For our study, we only selected teachers who had used the QTI at various points in their careers, had been teaching for more than 25 years, and were 54 years or older when they were invited to participate. Eight teachers in the database met these criteria.

For the second step we asked these eight teachers to complete two questionnaires: the Job Satisfaction Index (ASI, Van der Ploeg & Scholte, 2003), and the Dutch translation of the Maslach Burnout Inventory (UBOS, Schaufeli & Van Dieren-donck, 1995). Four of the teachers had quite a high job satisfaction score and a very low to mean burnout score. We selected these four teachers for this study: two female teachers, Ellen and Ada, and two male teachers, Hans and Jan. They all worked at public secondary schools in the central part of the Netherlands (Table 2.1).

Table 2.1 Job Satisfaction Index (ASI) and mean scale scores on the Maslach Burnout Inventory (UBOS) for the four teachers

Names ³	UBOS emotional exhaustion	UBOS depersonalization	UBOS personal accomplishments	ASI
Ellen	1.00	.57	3.71	123
Ada	1.00	1.43	4.71	132
Hans	.38	.28	5.00	121
Jan	1.13	1.57	3.57	112

Note. UBOS Emotional Exhaustion: very low $\leq .37$; low $.38-1.12$; mean $1.13-2.74$; high $2.75-4.34$; very high ≥ 4.38 . UBOS Depersonalization: very low $\leq .42$; low $.43-.99$; mean $1.00-2.17$; high $2.17-3.13$; very high ≥ 3.14 . UBOS Personal accomplishments: very low ≤ 2.28 ; low $2.29-3.28$; mean $3.29-4.42$; high $4.43-5.13$; very high ≥ 5.14 . ASI: low $30-44$; rather low $45-74$; neutral $75-104$; rather high $105-134$; high $135-150$.

³ These names are fictitious to ensure privacy

2.3 Data-gathering methods

Narrative-biographical method

We used the narrative-biographical method (Kelchtermans, 1994) to collect data on experiences that the four teachers considered decisive for the development of their job satisfaction and for their relationships with their students. "Biographical" in the narrative-biographical method refers to the fact that human behavior is meaningful, and that the meaning is derived from past experiences. In the narrative-biographical method, the respondents' memories are used as data. The teachers' stories are used to understand their thinking and the ways in which this thinking influences their present feelings and actions. We used the story line method (Kelchtermans, 1993) in the interviews. Each teacher was interviewed once. The interview lasted two hours on average. We first examined the teachers' perceptions of their work at present. We asked if they enjoyed their work, how they experienced their relationships with students, and if they were happy with these relationships. Then we asked them to rate their present job satisfaction on a five-point scale, ranging from very high (5) to very low (1). Subsequently, we asked them to depict this score on paper using a point on a scale in a graph, and to indicate where this score was for their job satisfaction earlier in their careers by drawing a line on the graph representing the past (Fig. 2.4). This helped them to visualize fluctuations in their job satisfaction over time. Finally, we asked the teachers to identify the causes of each of these fluctuations. The same procedure was repeated for the teachers' appreciation of the quality of their relationships with students.

Questionnaire on Teacher Interaction

The data collected on the teachers' retrospective ideas about their relationships with their students using the narrative-biographical method were combined with data on students' perceptions of the patterns in their interpersonal behavior that had been gathered on two or three occasions earlier in their careers. The data on the students' perceptions had been gathered using the Questionnaire on Teacher Interaction and were stored in an existing database (Brekelmans et al., 2005). Perceptions of the patterns in teacher interpersonal behavior are indicative of teacher-student relationships (Wubbels et al., 2006). All four teachers were also asked to have their students complete the QTI in one of their classes in the period they were interviewed. We asked them all to choose a third grade class to facilitate comparison. Most of the students in Dutch third grade classes are 14-15 years of age. Earlier research (Wubbels et al., 2006) had shown that the classes of experienced teachers usually have the same type of interpersonal pattern, although there can be differences between classes; however, those differences are considerable higher for beginning than for experienced teachers. In all classes of the four teachers the number of students was between 25 and 30.

3. RESULTS

We present a summary of the interviews with the teachers using the narrative-biographical method, and report on the data gathered using the QTI on perceptions of the teacher-student interpersonal relationships.

Ellen

Ellen, a teacher of Dutch, has been teaching for more than 25 years and has been employed at her present school for 15 years.

Ellen indicated that she was very satisfied with her work at present (score 5 on the five-point appreciation scale, as shown in Fig. 2.4). She only began to enjoy her work as a teacher after she got a job at her current school. Before that, she was a teacher in vocational education. She enjoyed this much less (score 2). First she taught only lower secondary school classes at her present school, but after obtaining her license to teach in upper secondary education, she also took up teaching in these classes. Her increased job satisfaction coincided with this. She has always taken her own professional development in hand and enrolled in many courses. About a year before the current interview, when she became team manager for the upper general secondary classes at her school, she experienced a dip in her job satisfaction (score 2). The cause of her dissatisfaction lay with her team management role. In her perception, her colleagues were not prepared to invest in the further development of education in the classes, which she was eager to promote. For this reason, she abandoned her management job and went back to teaching. Apart from teaching, she is currently enrolled in a master's course on subject methodology; this has restored her job satisfaction to its previous high level. In terms of career trajectories (Hargreaves, 2005; Huberman, 1993), Ellen seems to have taken the path of continuing challenges, within and beyond the classroom. As long as she was a teacher without management tasks, she experienced continuing renewal.

Ellen indicated that she currently rated her relationships with students as good (score 4.5 on a five-point scale). In fact, Ellen reported that her relationships with students, which only became truly significant when she started out at her present school, have steadily improved over time.

In the beginning of my teaching career I felt very uncertain. I thought it was important how students perceived me. In that time, I had a lot of discussions with the students. When students didn't agree with me, I reacted very strictly to them, and that didn't have a positive effect on my relationship with them. (Ellen)

When her own children reached secondary school age, she perceived this as having a positive influence on her relationships with students, as she was better able to understand them and empathize with them.

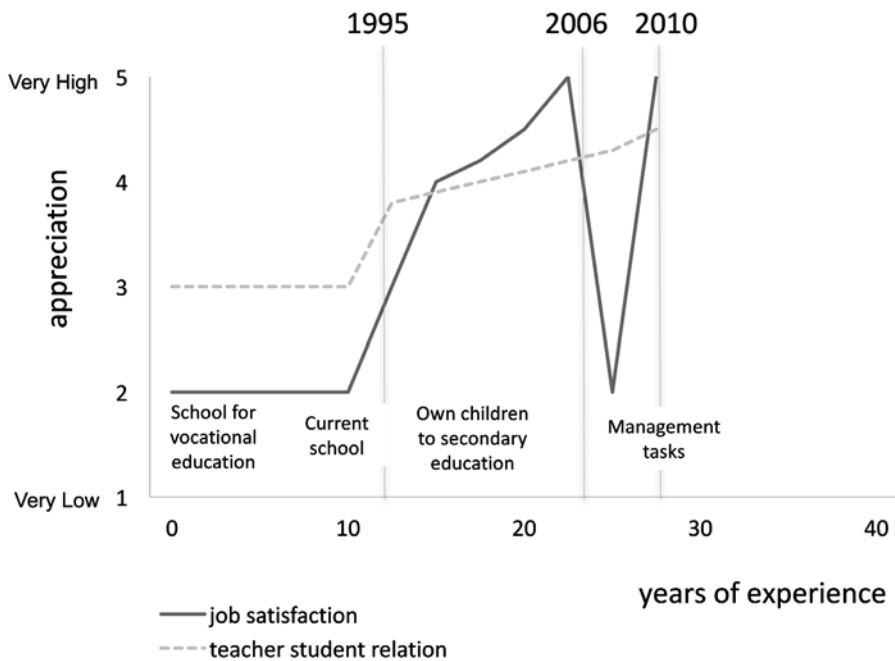


Fig. 2.4 Perceptions of job satisfaction and teacher-student relationship: Ellen.

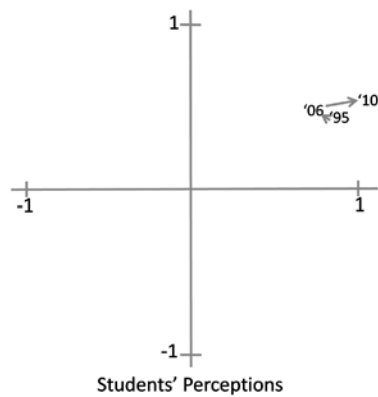


Fig. 2.5 Students' perceptions of the pattern in the teacher's interpersonal behavior: Ellen.

I think that it is very important when you, as a parent, have children in secondary education yourself. You are teaching students who are the children of people like yourself. And you want other people to treat your children in a certain way, so you also treat your students, the children of other people, in that way. (Ellen)

She said her relationships with students continued to improve and she had the feeling that she was getting steadily closer to them, a process that was greatly aided, for instance, by talks she had with several students after one of their parents had died.

Ellen has an authoritative interpersonal pattern according to her students, as can be seen in Fig. 2.5. Comparison of her QTI scores (1995-2009) showed that students' perceptions of patterns in her interpersonal behavior were high on both agency and communion at the various points during her career when QTI data were gathered. However, no big changes were visible in students' perceptions, even though Ellen retrospectively remembered improvement. Comparison of her self-report on her relationships with students and the findings from the QTI shows that Ellen's self-perceptions are in line with the perceptions of the students.

Ada

Ada, a teacher of French, has been teaching for 35 years, to her great satisfaction (score 5, Fig. 2.6).

She has had several management tasks, which she expanded in recent years, at the expense of the teaching tasks. She now felt that her position in the school was more important. For the past ten years, her job satisfaction has been very high. There was a brief period of two years in which she went job-hunting for a non-teaching job (job satisfaction score at that point 2.5), but eventually she decided to stay in education. In the period before that, she had had a rough time in her private life, but this did not adversely affect her job satisfaction. Quite the opposite in fact: she was happy to be able to escape to school.

I had very big problems with my son and, in that same period, my parents got sick and died. If I hadn't had my work then, I would certainly have burned out. I noticed at that time that I was very happy when holidays were over and I could go back to work. (Ada)

In her first five years in teaching, she had not been very content, but once she got a job at the upper secondary school, her appreciation grew to the maximum score. In terms of career trajectories (Hargreaves, 2005; Huberman, 1993), Ada has taken the path of the negative focuser, avoiding classroom teaching as much as possible in her later career. Ada now gave a score of 4 for her appreciation of her relationships with students. She indicated that this appreciation had diminished somewhat over the last two years: the gap between her and the students had widened and she had become stricter.

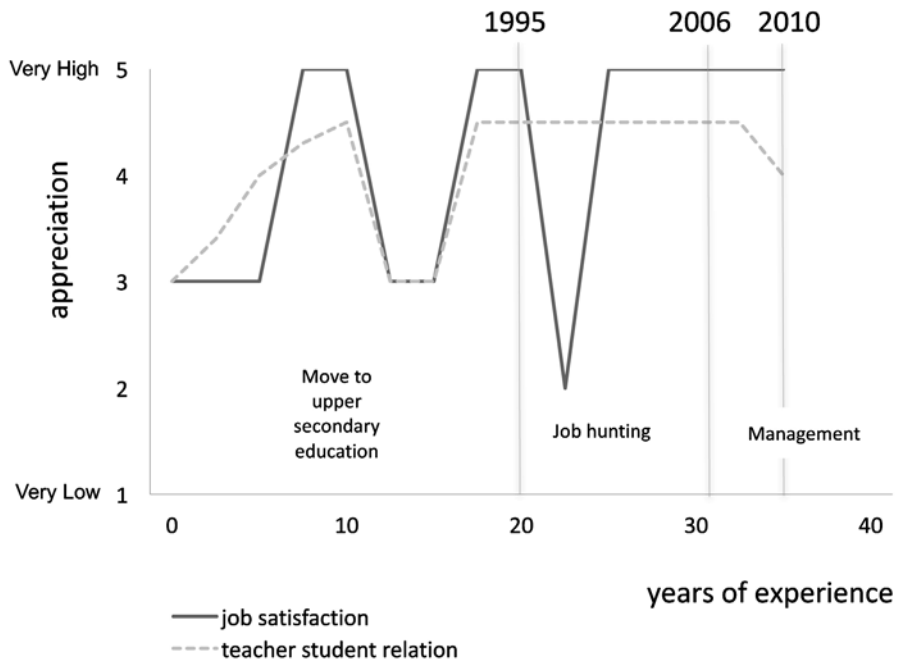


Fig. 2.6 Perceptions of job satisfaction and teacher-student relationship: Ada.

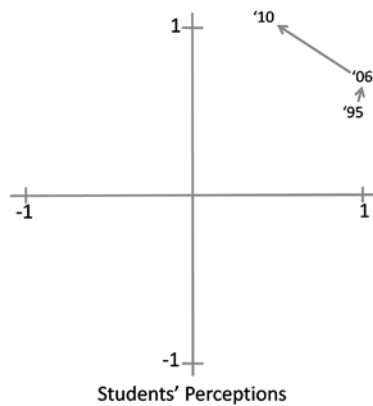


Fig. 2.7 Students' perceptions of patterns in the teacher's interpersonal behavior: Ada.⁴

⁴ Ada's profile for 2010 seems to be an exception; the profile does not match any of the profiles distinguished in Fig. 2.3

In recent years I have become stricter, I keep more distance from the students. When my own children were the same age as my students, I was more concerned about my students. At that time I couldn't let go of the students' problems. Now, I can. (Ada)

In the period from 20 up to 2 years previous to the current interview, her appreciation rating was consistently at the same level of 4.5. In the period before that, she worked at a school for pre-vocational education, had difficulty relating to these students, and rated her relationships with students in this period with a score of 3. She felt that in the first few years of her career, her relationships with students improved steadily from a 3 to a 4.5 score (Figs. 6 and 7).

Inspection of her QTI scores (1995-2010) showed that students perceived Ada as higher on agency in 2010 than in previous years in which students completed the QTI for her. After a small rise in 2006, her 2010 students perceived her as lower on communion than her 1995 students did. Fig. 2.7 shows that Ada developed from a directive pattern in the direction of a more repressive pattern. Comparison of her self-perceptions and the findings from the QTI reveal that Ada has a more positive perception of the relationship than her students have. Although she recognizes that the distance has increased between her and the students, in her perception the relationship is still good.

Hans

Hans is a teacher of German. He has been teaching for over 40 years. He intends to retire at the end of this year.

After his early years in the profession (which were not very successful), he was very satisfied in his work (score 4.5, Fig. 2.8); however, his satisfaction has dropped a little in recent years (score 4.0). He thinks it is time to retire. When he was a student, it was not his goal to become a teacher. But after some unsuccessful applications for other jobs, it was the only option available to him. After some years of teaching, he noticed that there was still no alternative. Furthermore, he had bought a house and started a family: he no longer considered changing jobs an option. It has been very important for Hans to do other things in addition to his job as a teacher: for example, being a member of several committees, working at the university, and being an active sportsman.

I think it's time for me to quit. I have been doing this work for nearly 40 years now. I have liked it, especially when I also worked at university. The last few years I have only worked at this school, and I think that's been too limited for me. (Hans)

He teaches in lower and upper secondary school classes. His work at the university made it possible for him to engage in continuous professional development; it helped him to stay satisfied in teaching. He has not always perceived the atmosphere in school as very positive; during his career he has had problems with colleagues and the school management. He has always operated very autonomously: adjusting the principal's rules

to match his own way of teaching. For example, when the principal prescribed that it was no longer acceptable to give students a test without warning, he decided to plan a lot of tests in the students' year program, but not to give a test on every date one was scheduled. In this way he succeeded in continuing his practice: the effect on the students was the same as before the principal's intervention.

Hans seems to be a negative focuser in terms of career trajectories (Hargreaves, 2005; Huberman, 1993). He has succeeded in managing his work as a teacher in line with his own personal interests, which were not in teaching. Hans gave a score of 4 for his current relationship with students. He had the feeling that the students appreciated him and that this had always been the case, even though he noticed a slight decline in recent years.

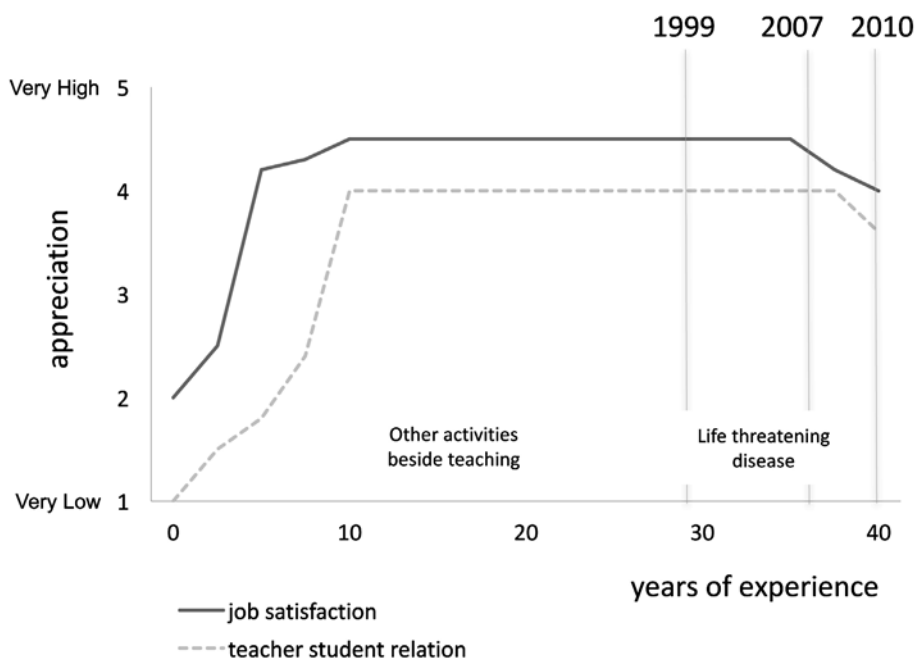


Fig. 2.8 Perceptions of job satisfaction and teacher-student relationship: Hans.

My relationship with students has always been very good, perhaps a little less good the last couple of years. Last year I had serious problems with one class, but that was an exception. (Hans)

After recovering from a life-threatening disease, he became a fanatic sportsman. His excellent performances in sport provided him with topics of conversation with his students. He mentioned problems he had with some classes, but he considered these prob-

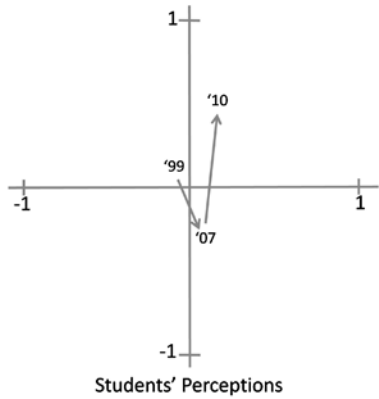


Fig. 2.9 Students’ perceptions of patterns in the teacher’s interpersonal behavior: Hans.

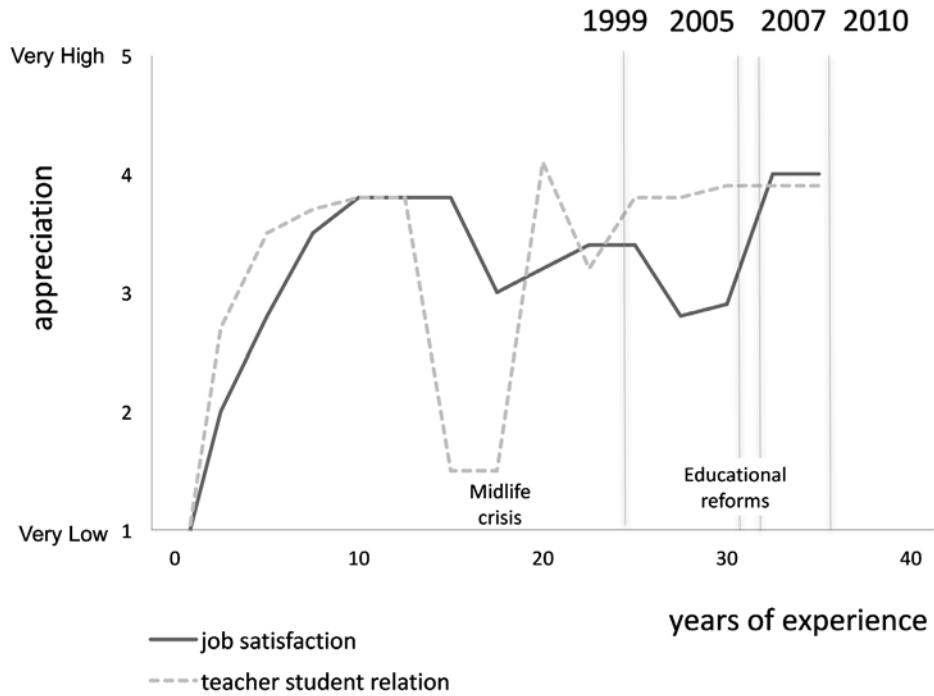


Fig. 2.10 Perceptions of job satisfaction and teacher-student relationship: Jan.

lems exceptions. They did not influence his scores for job satisfaction and appreciation of the relationship with students (Fig. 2.8).

A look at Hans' QTI scores showed that his current students perceived Hans as being higher on agency and a little higher on communion than did his students in earlier years. With regard to his pattern (Fig. 2.9), we see that it changed from drudging towards directive. It is striking that he talked so positively about his relationship with students during his career, because the QTI data from previous periods (1999, 2007) showed that from the students' point of view this relationship was far from positive.

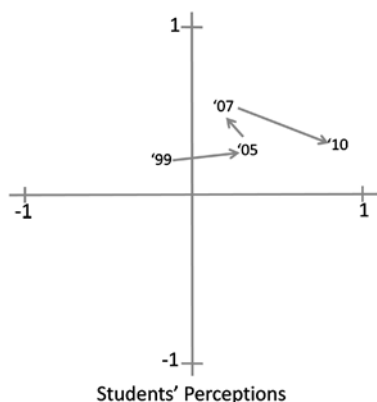


Fig. 2.11 Students' perceptions of patterns in the teacher's interpersonal behavior: Jan.

Jan

Jan has been a teacher of German for 33 years. After some years of teaching he acquired an additional degree in economics, which he now teaches as well. He has worked at the same school for over 20 years. He was once a student himself at this school.

Jan indicated that his current job satisfaction was very high (score 4.5, Fig. 2.10): the highest in his whole career. He considered it a privilege to work with young people, and promoted the teaching profession among his students. The explanation for his recent high job satisfaction was his feeling that he no longer "needs" so much; as an example, he said that he no longer had to know what music his students liked. The introduction and implementation of reforms in the nineties had a negative influence on his job satisfaction (score 2.7). He never understood the purpose of these reforms. At that time he considered changing jobs, but because of family responsibilities and his mortgage he did not do so.

I had ideas about the best ways to teach a language: first listening, then reading, and then more active skills like writing and speaking. And then, suddenly, due to the reforms I was only allowed to teach reading: so boring... And all those study planners; I couldn't improvise any more..... (Jan)

After the educational reforms of the nineties were readjusted, he enjoyed his work more again. Another dip in his job satisfaction had occurred some years earlier. Jan had a “midlife crisis” and did not like anything anymore (score 3). After his first years of teaching until his first dip, his job satisfaction was rather high (score 3.8). Jan’s career trajectory seemed to be on the path of a positive focuser (Hargreaves, 2005; Huberman, 1993). He decided to focus his energy on the students, in the classroom, where he could make a difference by passing on his knowledge to his students. Jan gave the score 3.8 for his appreciation of the relationship with his students at present. He thought his students liked him, but also thought he did set high standards. After the first years of teaching until his midlife crisis, his perception was that he had a good relationship with his students. During his midlife crisis he was strict, inflexible, impolite, and sarcastic to his students.

At the beginning of my teaching career the relationship with students was very good. Twenty years ago I had a midlife crisis; I was unkind and sarcastic to my students. When I grew older, over fifty, it became easier: I wasn't so eager to be one of them anymore. You can easily ask the students which music they prefer. They understand that you know nothing about their music. When I was thirty that felt different. (Jan)

After that, the relationship improved and in his perception has been improving ever since. Students trust him, tell him their personal problems, and ask his advice. He indicated that he preferred teaching students in upper secondary education; he understands these students better than students in the lower grades. Sometimes he had problems with lower grade classes, because, as he said: “I can’t stand it if they do not pay attention, and I find it difficult to reach them then.” He reported that he reacts more strictly in those classes (Fig. 2.10).

Inspection of his QTI scores (1999-2010) showed that students perceived Jan in the period of his midlife crisis (1999) as being relatively high on agency and low on communion. After this period, this changed in a positive direction. His pattern in 1999 was rather drudging and has changed since then towards authoritative (Fig. 2.11). We see a parallel in his perceptions and those of the students for the period of his midlife crisis. In the period after that crisis, we also see that his perceptions match those of the students. The exception in 2007 can perhaps be considered an incident: lower grade students completed the QTI, and he mentioned that he sometimes had trouble with these students.

4. DISCUSSION

Because of the impending teacher shortages in many Western countries, in combination with the ageing of the teacher population (OECD, 2005), it is important to know more about why veteran teachers leave the profession before retirement age. In the literature (Byrne, 1999; Chang, 2009; Friedman, 2006; Grayson & Alvarez, 2008; Hargreaves, 2000; Klassen & Chui, 2010; Lortie, 1975; Spilt et al., 2011) we found that a positive teacher-student relationship is important for teachers' job satisfaction. In this study, we focused on the following question: How were teacher-student relationships related to job satisfaction during the careers of four teachers who managed to maintain high job satisfaction until the end of their careers?

To answer this question we investigated the relationships with students and the job satisfaction of four teachers whose careers had lasted more than 25 years and who were over the age of 54, were happy with their job, and had no burnout symptoms. They belonged to the category of teachers who had managed to retain their job satisfaction and motivation (Day et al., 2006). It is noteworthy that three of the four teachers in this study had tried to leave the profession at least once during their career; none of them succeeded.

Taken together, our findings indicate that the ways in which veteran teachers retain job satisfaction differ considerably. We recognized the various career trajectories (Day et al., 2006; Hargreaves, 2005; Huberman, 1993) in the paths taken by our four teachers: avoiding classroom teaching (as much as possible), continuing renewal, and positive and negative focusers.

In their stories all teachers reported the importance of a good relationship with the students during their careers. In the graphs we see some correspondence between the lines of job satisfaction and teacher-student relationship: in periods that they perceived their relationship as less good, they also perceived less job satisfaction. This was especially clear for their first years of teaching: in all graphs we saw a parallel growth in job satisfaction and improvement in the relationships with students. Later in their careers we saw more differentiation, but in periods with high job satisfaction we also saw a high score on the relationship with students. An exception is Ada's graph for recent years: she indicated a high score for job satisfaction and a diminishing score for relationship with the students. As a consequence, she avoided classroom teaching as much as possible.

During some periods the teachers perceived less job satisfaction but they nevertheless perceived the teacher-student relationship as good. They reported other causes for their dissatisfaction: educational reforms, personal problems, etc. This finding is in line with the findings of Day and Gu (2009), Kyriacou (2001), and Johnson et al. (2005).

Based on previous research in which the QTI was used to measure changes in students' perceptions of patterns in teacher interpersonal behavior throughout the career (Brekelmans et al., 2005), we expected that these perceptions would remain similar for agency for the final period of their careers, and slightly lower for communion. Our results show that the patterns in the interpersonal behavior of these teachers were not

as stable as expected (Brekelmans et al., 2005). We found that all of them had higher scores on agency at the end of their careers than earlier in their careers. We found three of the four teachers to be higher on communion, according to the students, than earlier in their careers. A possible explanation for these findings is that successful, satisfied veteran teachers, such as these four teachers, have a high level of self-efficacy for classroom management (Klassen & Chui, 2010) and have a low level of student misbehavior (Betoret, 2006; Jepson & Forrest, 2006; Kyriacou, 2001). There may be a relationship between the absence of classroom management problems and the higher scores on agency and communion.

Three of the four teachers developed more positive teacher-student relationships during their career: from drudging to more directive (Hans), from authoritative to more tolerant authoritative (Ellen), and from repressive to more authoritative (Jan). Only one teacher (Ada) developed in a less favorable direction: from a more authoritative to a more repressive pattern. So, although the teachers all reported having had good relationships with their students during their careers, the findings of the QTI revealed that students did not in all cases perceive the relationship as being so positive. Two of the teachers stayed as much as possible in classroom teaching. Jan remained happy as a teacher by recognizing that he had become older; he accepted that there was an increasing gap between him and his students, both in age and emotionally. He also realized that this was all right, that there was no good reason to try to deny the existence of the gap. This made him more relaxed in his dealings with students; as a consequence, students perceived him as higher on communion over time. Ellen had a good relationship with students when she decided to quit classroom teaching and took on management tasks. She felt very unhappy in her management position, realized that she was in this profession because of the teaching and the contact with students. She therefore left her managerial role and returned to the classroom. She appears to have been able to adapt to the educational system she found herself working in (cf. Eilam, 2009). Although the other two teachers (Ada and Hans) reported good relationships with their students, the results of the QTI revealed that the students perceived these teacher-student relationships as being less positive. Like Jan, Ada recognized the growing age and emotional gaps between herself and the students. Her perception of the teacher-student relationship was in line with that of the students. However, unlike Jan, she was perceived as being lower on communion by her students than earlier in her career. She was aware of this and she adjusted her working conditions to her new situation: she moved into a new education-related role by taking on other tasks instead of teaching (cf. Eilam, 2009). Hans stayed happy in quite another way. He perceived his relationship with his students as being good, whereas his pattern, even though it developed in a positive direction in recent years, was not so positive in the eyes of his students. It appears he chose to avoid emotional involvement with his students (cf. Spilt et al., 2011). He opted for a positive perception of and a positive story about this relationship, which was not in line with the students' perceptions. Comparison of his self-perceptions and the students' perceptions confirmed this hypothesis. Findings from the QTI reveal that in his students' perceptions

he seems to have a kind of hardiness which we interpret as a mechanism like narcissism to protect himself against psychological assaults (cf. Cohen, 2009). It appears that perceiving reality as being more positive than it probably is, which can be regarded as a cognitive trick, keeps Hans's job satisfaction high and the burnout index low.

Taking our findings for these four teachers together, we found a positive relationship between their job satisfaction and the self-reported quality of the teacher-student relationship at the start of the career; for three of the four teachers, we also found that relationship at the end of the career. But we also found that a teacher's positive report about the teacher-student relationship can differ from the students' perceptions of that relationship.

Our method of combining the stories of the teachers with the student perceptions collected using the QTI resulted in a differentiated picture of the association between job satisfaction and relationships with students at the end of their teaching careers. Ways in which teachers managed to stay happy at the end of their careers varied considerably. We recognized in some cases the trends revealed in earlier research, but we also came across differences.

This study has several limitations. One limitation is that we only had data from the QTI for these teachers for the period since 1995, so we could not compare their self-reported perceptions of the teacher-student relationships with those of the students in the period before that time. It would have been interesting to know more about students' perceptions of the teacher-student relationships in the earlier years of these teachers' careers.

Another limitation is that we compared the teachers' perceptions of the teacher-student relationships from several years and classes. There could be some variations in interpersonal patterns among classes, although we know from earlier research (Brekelmans et al., 2005) that these differences are lower for experienced teachers than for beginning teachers.

The current findings indicate that it could be important to look more closely at the complex relations between job satisfaction and teacher-student relationships to get stronger clues for policies to keep teachers in the profession for longer towards the end of their career. Based on the results of the present study, it might be worthwhile for policy makers and school administrators to pay attention to teacher-student relationships and to consider policies to try to retain veteran teachers longer in the profession. If there are signals that the teacher-student relationship is deteriorating, coaching might help improve the relationship or, if that doesn't work out, looking for other tasks for the veteran teacher in the school could be a solution.

We investigated satisfied veteran teachers in the current study. From the perspective of job satisfaction and burnout, and the associated attrition of veteran teachers, it appears to be important to focus also on the experiences of teachers who did not maintain high job satisfaction towards the end of their careers. In future research we intend to explore the quality of teacher-student relationships in this group of teachers, from the perspectives of both the teachers and the students, in order to get more clues for poli-

cies to keep veteran teachers in the profession longer. In future research we also aim to focus on the relationships of veteran teachers with individual students to learn more about the causes underlying students' perceptions of the teacher-student relationships. This might enable us to elaborate on the differences we found in one case between the perceptions of the teacher and those of the students, and the possible effects of those differences on the job satisfaction of the teacher involved.

CHAPTER 3

Veteran teachers' job satisfaction as a function of personal demands and resources in the relationships with their students⁵

ABSTRACT

Many teachers experience their profession as stressful, which can have a negative impact on their job satisfaction, and may result in burnout, absenteeism, and leaving the profession. The relationship with students can have both positive and negative implications for the job satisfaction of teachers, both early and later in their careers. The current study focused on the relationship between veteran teachers' job satisfaction and their aspirations in teacher-student relationships. Data were gathered among 12 Dutch veteran secondary school teachers, including interviews, the Questionnaire on Teacher Interaction, and the Questionnaire on Teachers' Self-Efficacy. Veteran teachers' job satisfaction appeared to be positively related to the extent to which their aspirations in teacher-student relationships had been realized. Teachers who had failed to realize their aspirations in teacher-student relationships showed relatively low job satisfaction, or avoided feelings of low job satisfaction by reducing the number of tasks that were directly related to teaching students. An implication for coaching veteran teachers is the need to pay more attention to the teacher-student relationship so that they can adhere to the way they would like to teach their students.

1. INTRODUCTION

Many teachers experience their profession as stressful (Johnson et al., 2005), which can have a negative impact on their job satisfaction, and may result in burnout, absenteeism, and leaving the profession (Betoret, 2006; Greenglass & Burke, 2003). Several factors may cause teachers to experience the teaching profession as stressful. Examples are work overload, low job status, and the demands of administrators, colleagues, students, and parents (Greenglass & Burke 2003). Of these causes, disruptive student behavior and poor relationships with students are the most significant (e.g., Spilt, Koomen, & Thijs, 2011). Problems with classroom management and disruptive student behavior are not only important causes of teacher attrition early in the career (Spilt et al., 2011), but they can also cause teacher stress and feelings of burnout later in the career (Tatar & Horenczyk, 2003). However, the relationship with students can also be a major positive motivation to become a teacher and to stay in the profession (Sinclair, Dowson, & Mcinerney, 2006), and can be positively related to teachers' job satisfaction (Grayson & Alvarez, 2008).

The relationship with students, therefore, can have both positive and negative implications for teachers' job satisfaction. The association between teacher-student relationships and teacher job satisfaction might be mediated by teachers' perceptions of the

5 This chapter is based on Veldman, I., Admiraal, W., van Tartwijk, J., Mainhard, T., & Wubbels, T. (2016) Veteran teachers' job satisfaction as a function of personal demands and resources in the relationships with their students, *Teachers and Teaching*, 22:8, 913-926, DOI: 10.1080/13540602.2016.1200546

demands put on them by their relationships with students and the resources they feel they possess to cope with these demands. This balance between demands and resources might be especially delicate for veteran teachers as their relationships with students often have changed over their teaching careers. In the current study, among 12 veteran teachers, we elaborated and applied the Job Demands–Resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) to explore the associations between teachers' relationships with their students and their job satisfaction.

1.1 Job Demands-Resources Model

According to the Job Demands–Resources (JD–R) Model (Demerouti et al., 2001), two broad categories of work characteristics can be distinguished that interactively influence job satisfaction: job demands and job resources. Job demands refer to those aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort, and are, therefore, associated with physiological and/or psychological costs. Job resources refer to those physical, psychological, social, or organizational aspects of the job that may reduce job demands and the associated physiological and psychological costs. The JD–R model proposes that high job demands and a lack of job resources form a major cause of teachers' stress and diminishing job satisfaction (Demerouti et al., 2001). Xanthopoulou and her colleagues (2007) found that job resources were related to personal resources such as employees' self-efficacy, self-esteem, and optimism, and made them feel more capable of controlling their work environment. Presumably, as a result of these resources, employees are more confident and proud of the work they do, find meaning in it, and stay engaged. Employees who have personal resources are confident about their capabilities and optimistic about their future, and thus may identify or even create more aspects of their environment that facilitate them to reach their work goals; this strengthens their work engagement. The authors also concluded that personal resources play a significant role in the JD–R model since, together with job demands and job resources, personal resources contribute to explaining variance in burnout and work engagement. In the current study, the JD–R model including personal resources and demands was used to examine the association of teacher–student relationships and other factors with veteran teachers' job satisfaction.

1.2 Job satisfaction of veteran teachers

Veteran teachers' job satisfaction has been investigated extensively. Hargreaves (2005), for example, distinguished four types of elementary, middle, and high school teachers based on the later years of their teaching careers, in a Canadian sample: (1) the teachers who are able to keep finding challenges beyond and within their classrooms; (2) the positive focusers who concentrate their efforts in the small world of their own classrooms where they can pass their wisdom on to young people in the autumn of their careers; (3) the negative focusers who have always managed to protect their own

interests rather than the interests of the students. In their later careers, they find ways to get the easiest timetables and classes; and (4) the disenchanted, who typically committed themselves to educational reforms earlier in their careers that were discarded later. As a consequence, they have lost their ideals and motivation. Most veteran teachers were found to be in one of the last three types. Several studies of types of veteran teachers have shown that their personal resources play a crucial role in the demands they experience during their teaching careers (Day & Gu, 2010, Eilam, 2009). Not only do the different types of teachers differ in the demands they see in their job, but they also vary in the resources they use to cope with these demands. Chang (2009) and Spilt et al. (2011) showed that the emotional involvement of teachers with their students is a primary explanation for the high stress in teaching, but that interpersonal relationships between teachers and students have been underinvestigated in research on teachers' job satisfaction.

1.3 Personal demand: teacher-student relationships

Individual relationships with students are both a major reason to choose for the teaching profession (Sinclair, Dowson, & Mcinerney, 2006) and a source of teacher work stress (Spilt et al., 2011). Hargreaves (2000) observed that secondary teachers' positive emotions mostly came from acknowledgment, respect, appreciation, and gratitude from their students. In his landmark study on schoolteachers, Lortie (1975) already noted the importance of establishing meaningful personal relationships with students. He found that these relationships were more important for teachers' job satisfaction than controlling the students. Friedman (2006) presented teachers' expectations about their work on a dimension, ranging from 'giving' (teaching, caring, and/or friendship) at one end to 'receiving' (respect and appreciation of the students) at the other. He argued that one major cause of teacher work stress and burnout is the mismatch between giving and receiving. These findings are backed up by the research of Grayson and Alvarez (2008), who found that teachers who succeed in maintaining positive relationships with their students are also more likely to stay motivated and enthusiastic and to enjoy their work. So there seems to be a relationship between, on the one hand, teachers' aspirations in maintaining good relationships with students as part of their profession and, on the other hand, their satisfaction with the job. We regard teachers' aspirations in teacher-student relationships as a personal demand.

1.4 Personal resource: teacher self-efficacy

Teachers' self-efficacy in realizing the aspired relationship may be crucial for the job satisfaction of most teachers. Bandura (1986) defined self-efficacy as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances". Although Bandura (1997) stated that self-efficacy beliefs are relatively stable, other researchers (e.g., Tschannen-Moran, Woolfolk-Hoy,

& Hoy, 1998; Woolfolk-Hoy & Burke Spero, 2005) found changes in teachers' self-efficacy across the teaching career. In a study among 1430 practicing teachers in Western Canada, Klassen and Chui (2010) found that teacher self-efficacy was influenced nonlinearly by years of experience. Teacher self-efficacy regarding engaging students, managing student behavior, and using effective instructional strategies grew with experience in the early and mid-career stages, and declined in the late career stages. They found that teachers with lower levels of self-efficacy for classroom management also reported more feelings of stress caused by student misbehavior. Incorporating teachers' perceived personal demands and resources (cf., Xanthopoulos et al., 2007) into the Job Demands–Resources model (Demerouti et al., 2001) may help in understanding the mechanisms operating between veteran teachers' personal demands and personal resources, and their job satisfaction. This is particularly the case with relationships with students, which is not only an under-researched aspect of teachers' job satisfaction but which might also be an aspect that changes over the teacher career. We used the Job Demands–Resources model to answer the following research question:

How do veteran teachers' aspirations, their realized aspirations, and self-efficacy with respect to the relationship with their students relate to their job satisfaction?

2. METHODS

A multiple-case study design was used to examine the job satisfaction of 12 Dutch veteran secondary school teachers.

2.1 Sample

To select teachers for these case studies, we used a pool of Dutch teachers who had participated in earlier research on teacher–student relationships (Brekelmans, Wubbels, & Van Tartwijk, 2005). Data on these teachers' relationships with their students were gathered among about 600 teachers and their approximately 25,000 students. The teachers taught in about 100 different secondary schools throughout the Netherlands. We selected veteran teachers from among these 600 teachers by identifying teachers who had been teaching for more than 25 years and were 54 years of age or older. Sixty-four teachers met these criteria. Unfortunately, we succeeded in contacting only 21 of these teachers because contact details for the majority of them were no longer correct. Of these 21 teachers, 12 agreed to participate: 4 male and 8 female teachers, ranging in age from 54 to 64.

2.2 Instruments

In Table 3.1, we summarize the relationships between the four main variables of our study and the instruments used to gather the data. We used three questionnaires in this study:

the Teachers' Sense of Efficacy Scale (TSES: Tschannen-Moran & Woolfolk Hoy, 2001), the Questionnaire on Teacher Interaction (QTI: Wubbels, Brekelmans, den Brok, & Van Tartwijk, 2006), and the Job Satisfaction Index (ASI: Van der Ploeg & Scholte, 2003). Additionally, the teachers were interviewed twice to gather data on their job satisfaction, their aspirations in teacher–student relationships, and their self-efficacy in teacher–student relationships.

Table 3.1 Overview of variables and instruments.

	Int. 1	Int. 2	TSES	QTI	ASI
Job satisfaction	x				x
Teacher–student relationships aspirations		x		x	
Teacher–student relationships realized aspirations	x	x		x	
Teacher–student relationships self-efficacy		x	x		

Note. Int.1 = Interview 1; Int. 2 = interview 2; TSES= Teachers' Sense of efficacy Scale; QTI = Questionnaire on Teacher Interaction; and ASI = Job Satisfaction Index.

Interviews

The first author interviewed the 12 teachers twice; first about their job satisfaction and their realized aspirations in the relationships with their students, and second about their aspirations for these relationships and their self-efficacy in realizing these aspirations. Each interview lasted approximately one-and-a-half hours. All interviews were transcribed and summarized in a table, organized around the variables aspirations and realized aspirations in teacher–student relationships and job satisfaction. Member checks were done by presenting the resulting table to the teacher and asking if he or she was cited correctly, and if any corrections, revisions, or additions were needed.

In the first interview, the teachers were asked how they judged their job satisfaction, if they had perceived changes in their teacher–student relationships in recent years, and how they perceived the quality of their teacher–student relationships at the moment: their realized aspirations. In the second interview, we focused on the teachers' aspirations and self-efficacy in teacher–student relationships. We asked the participants to explain the differences between their ideal and their self-perceptions of their teacher–

student relationships. Further, we asked them if they thought that these differences had changed recently, if they felt they were capable of realizing their ideal (i.e., their self-efficacy), what constraints they experienced, and how they could be helped to realize their ideal.

Questionnaire on Teacher Interaction

In the first interview, we asked the 12 teachers to complete a 50-item version of the QTI (Wubbels et al., 2006). The QTI can be used to measure perceptions of teacher – student relationships by asking questions about patterns in the teacher's interpersonal relationships, which are indicative of teacher–student relationships (Wubbels et al., 2006). The model for interpersonal teacher behavior underlies the QTI. This model is based on two independent dimensions that have been proven to be both necessary and sufficient to describe perceptions of the interpersonal meaning of behavior (e.g., Kiesler, 1983; Tiedens & Jimenez, 2003). In the model for interpersonal teacher behavior, these dimensions are referred to as agency and communion (Wubbels et al., 2012).

Agency describes the degree of influence the teacher has over what goes on in the classroom. Communion refers to the degree to which teacher and students interact in harmony or disharmony. In the model, these two dimensions underlie eight types of interpersonal teacher behavior, referred to as Directing, Helpful, Understanding, Compliant, Uncertain, Dissatisfied, Confronting, and Imposing. In the QTI, items are divided into eight scales corresponding with the eight types of behavior. Items take the form of statements about the teacher. Two sample items are “This teacher is friendly” (Helpful Scale) and “This teacher is strict” (Imposing Scale). Answers are given by scoring on a five-point Likert-type scale ranging from “never/not at all” to “always/very”. Each completed questionnaire yields a set of eight scale scores. Scale scores equal the sum of all item scores, and are then rescaled to be reported in a range between 0 and 1. The dimension scores (agency and communion) can be obtained from these scale scores using the formula given in endnote 1. After completing the questionnaire, each teacher had an agency and a communion score for their aspirations (ideal perceptions) and their realized aspirations (self-perceptions). Reliability and validity of this version of the QTI were found to be satisfactory (Wubbels, Brekelmans, den Brok, Levy, Mainhard, & van Tartwijk, 2012).

We hypothesized that the smaller the difference between veteran teachers' self-perceptions of their teacher–student relationships and their ideal teacher–student relationships, the closer they had come to realizing their aspirations in the teacher–student relationship, and the greater would be their feeling of being capable of developing satisfying relationships with their students.

Teachers' sense of efficacy scale

We used the Dutch translation of the short Teachers' Sense of Efficacy Scale (Mainhard et al., 2008) of Tschannen–Moran and Woolfolk Hoy (2001). The scale consists of 12 items, and has 3 subscales: efficacy in student engagement, efficacy in instructional strategies, and efficacy in classroom management. Items take the form of questions

about being able to do or achieve something. Examples of items are the following: “How much can you do to control disruptive behavior in the classroom”, “How well can you implement alternative strategies in your classroom”, and “How much can you do to get children to follow classroom rules”. Answers are given by scoring on a seven-point scale ranging from “not at all” to “very good/well”. The reliability of the scale (Cronbach’s α) was 0.78 (Mainhard et al., 2008).

Job Satisfaction Index

To measure job satisfaction, we used the Job Satisfaction Index (Arbeidssatisfactie Index, ASI) (Van der Ploeg & Scholte, 2003). The questionnaire consists of 30 items: for example, “I have a lot of freedom in my work”, “I regularly look for another job”, and “I have the feeling that my colleagues appreciate my work”. All items were answered on a five-point Likert-type scale, ranging from “very unsatisfied” (1) to “very satisfied” (5) (Van der Ploeg & Scholte, 2003). The reliability of the scale (Cronbach’s α) was 0.90.

3. RESULTS

In Table 3.2, the results from the questionnaires for the 12 teachers are summarized. On the basis of the teacher scores for realized aspirations in the relationship with their students and job satisfaction, we distinguish four groups (see Table 3.3): (1) teachers with relatively high job satisfaction and a small difference between their aspirations (ideal perceptions) and their realized aspirations (self-perceptions) regarding the teacher–student relationships; that is, those who realized their aspirations in the relationship with their students, (2) teachers with relatively high job satisfaction who did not realize their aspirations, (3) teachers with relatively low job satisfaction who realized their aspirations in the relationship with their students, and (4) one teacher with relatively low job satisfaction who realized his aspirations.

3.1 Teachers with relatively high job satisfaction

Teachers who have realized their aspirations in teacher–student relationships

Three veteran teachers with relatively high job satisfaction realized their aspirations in their teacher–student relationships: Ellen, Harry, and Kevin. In the interviews, they reported that a major source of their job satisfaction was their contact with students. They all mentioned that they had managed to have good relationships, which they defined as including honesty and mutual respect. This is illustrated by the following quote from an interview:

I think respect is very important, respect for you as a person; you are an example for students, a role model. Students have to respect that, and have to approach you in line with that. (Harry)

Table 3.2 Overview of the questionnaire results.

	Job satisfaction	Self-efficacy	Self-efficacy in classroom management	Agency self-perception	Agency ideal	Communion self-perception	Communion ideal
Ellen	123	7.17	6.43	.86	.41	.71	.98
Kevin	129	6.75	7.07	.83	1.06	1.19	1.59
Harry	124	7.07	7.39	.81	1.30	1.43	1.59
Rose	77	7.16	8.36	.34	1.05	.25	1.25
Mary	81	6.75	6.43	1.80	1.00	1.80	2.10
Mimi	94	6.75	8.04	1.00	.91	-.04	.85
Rob	96	7.00	7.71	.88	1.40	.88	1.42
Hans	121	7.16	7.71	1.05	1.08	.15	.88
Maggie	123	6.75	7.17	.10	1.01	.16	1.49
Ada	132	6.75	8.03	1.30	.67	.00	.88
John	112	6.43	6.11	.43	1.29	1.59	1.71
Lars	89	6.43	6.43	.40	.82	1.47	1.57

All these teachers mentioned problems they sometimes had with students; nevertheless, they considered the relationships to be rather good. These three teachers were all involved in the school community: they were teaching full-time and were also involved in other activities in the school. Two teachers (Harry and Kevin) reported that they felt capable of having their ideal relationship with students. These findings were congruent with the results from the Teachers' Self-Efficacy Scale: they both had mean to high scores (compared with the other teachers in our study), especially for self-efficacy in classroom management. One of the teachers (Ellen) reported that she usually realized her ideal relationship, but she also mentioned she would like to score a little lower on agency and a little higher on communion. To explain this, Ellen reported that she really

wanted to be in charge in class; she didn’t want it to be too cozy, but she didn’t like it to be too strict either:

Sometimes I have problems with a class. Students can be very noisy, and they have a lot of fun. I can manage that, I can make them quiet, but I don’t like to do it. (Ellen)

Concerning her self-efficacy, she reported that as she became older, she found it more difficult to handle younger students. For this reason, she tried to avoid teaching in the lower grades. Comparing these findings with the results from the Teachers’ Self-Efficacy Scale, we noticed that she had a mean score for overall self-efficacy, and a slightly lower score for self-efficacy in classroom management.

Table 3.3 Classification of teachers on job satisfaction and difference between self-perceptions and ideal teacher–student relationships.

Realized aspirations ^a	Job satisfaction	
	Low ≤ 104	High > 104
Yes	Lars ^b	Ellen
		Harry
		Kevin
No	Mary	Maggy
	Rose	Ada
	Rob	John
	Mimi	Hans

a: Realized aspirations, Yes : difference between ideal and self perception ≤ 0.49 on affiliation and/or ≤ 0.55 on control; No: difference between ideal and self-perception > 0.49 on affiliation and/or > 0.55 on control (mean scores of teachers with 25-38 years’ experience: 0. 55 on control; 0.49 on affiliation (Mainhard, unpublished dataset))
b: Names are fictitious to ensure privacy

Teachers who have not realized their aspirations in teacher–student relationships

Four teachers with relatively high job satisfaction did not realize their aspirations in their teacher–student relationships: Hans, John, Maggy, and Ada. Three of them (Hans, Maggy, and Ada) had chosen to limit their teaching tasks to maintain high job satisfaction. Hans did other work outside school, Ada became a counselor at her school, and

Maggy decided to work part-time and deal with the consequences of having a lower income. They all mentioned that students and contact with students were very important for their job satisfaction, but they no longer felt capable of coping with the challenges of relating to students the whole week. These teachers mentioned that they did not succeed in realizing their aspirations in teacher–student relationships because they experienced difficulties in managing the students. The emotional distance between themselves and the students had increased over time, as students had changed and their own energy levels had decreased. They reported that they had become more insecure and were more afraid of losing control than in the past. Three interview excerpts illustrate this finding:

My children left home a long time ago; since then I know less about their lives, for instance, the music they like. The distance between myself and the students has increased. (Ada)

I don't succeed in reaching some students. I am not able to find a solution for this. Students sitting in class and looking at me as if to say, you have to motivate me, do your best ... I can't cope with that. I feel so insecure in those situations. (Maggy)

I set my standards high, I want to learn my students something. Especially students in lower levels don't like that. And that has an impact on the relationship. In the past I had fewer problems in this field. (Hans)

Maggy pointed out that if she had had more support from the school management in learning to manage student behavior, she might still have had full-time teaching tasks. Only John was still working full-time as a teacher. He admitted he did not care so much about the relationship with students. His motivation to teach was his love for his school subject.

In the past, the relationship with students was more important to me. Now the school subject, Biology, is more important. I notice my energy levels are lower than in the past. I often think: let go ... Yes, I think I'm a bit lazy nowadays ... (John)

Comparing these findings with the results from the Teachers' Efficacy Scale, we saw mean to high scores for self-efficacy and, especially, for classroom management in three cases (Maggie, Hans, and Ada). These scores did not support the findings from the interviews and the QTI. Only for John were our interview findings in line with the scores on the Teachers' Efficacy Scale.

3.2. Teachers with relatively low job satisfaction

Teachers who have realized their aspirations in teacher–student relationships

The teacher who realized his aspirations in teacher–student relationships, but had low job satisfaction (Lars), mentioned as the cause of his dissatisfaction severe problems with the school board: he didn't feel appreciated. This was why he had withdrawn from all other tasks in the school besides teaching.

The only joy I have at school is in the classroom, with my students. I try to avoid all other activities at school. I disagree with many decisions of the school board. (Lars)

Contact with students was important for his job satisfaction. For him, the important characteristics of teacher–student relationships were mutual acceptance and friendship.

I want to have a friendly relationship with my students; I want the students to accept me just the way I am, and I want to accept them. Usually I manage to have such relationships. (Lars)

He reported that the emotional distance between himself and the students had increased in recent years. He also noticed that the relationship improved once he had been with students for several years. He reported that he was able to create his ideal relationship with students. Nevertheless, his scores on the self-efficacy scales were lower than the average scores of the teachers in our study.

Teachers who have not realized their aspirations in teacher–student relationships

Four teachers with relatively low job satisfaction did not realize their aspirations in their teacher–student relationships: Mary, Mimi, Rose, and Rob. All of these teachers had full-time teaching tasks. As the origins of their low job satisfaction they mentioned problems with the school organization, reorganization of the school, and difficulties in coping with educational reforms. Two interview excerpts illustrate these findings:

In the past I could be a real teacher, I could lecture... Nowadays, after the educational reforms, I have to be more of a coach for the students, and I have to take into account all those differences between the students. I think it's very hard to cope with that. (Mary)

I have a severe problem with my school board. It's about my salary. That problem is the reason I don't like it any more at school. (Rose)

They all mentioned that they had good relationships with students, but the relationships had been better in the past. They all mentioned the growing emotional distance

between themselves and the students as the cause of this change. Three of the teachers (Rose, Mary, and Mimi) mentioned that they had become stricter than they would like to be:

I would like to be less strict, but I will not accept phones in class. Less strict means deterioration and I cannot accept that! (Mimi)

I want to be in control. Students have changed, and I often feel insecure in managing their behavior. I miss support in this from the school board. I've been working at this school for 38 years now, perhaps that's too long. I really want to manage the class in a more relaxed way, just like in the past. (Mary)

Setting high standards was the explanation for the strictness of another teacher (Rob).

I am strict, more than I like to be perhaps. But I set high standards, for the students and for myself. I want to teach the students; and I will not negotiate with them about it. I would like it be different, but I manage myself; I don't lack any support in this from the school board. (Rob)

The scores on the Teachers' Self-Efficacy Scale were not in line with our other findings for three teachers (Rose, Rob, and Mimi): they have relatively high scores for the self-efficacy scales, especially for classroom management. For the fourth teacher (Mary), the scores were in line with the interview findings.

4. DISCUSSION

The findings of this study provide insight into the relationship between veteran teachers' aspirations and self-efficacy in their teacher–student relationships, and their job satisfaction.

We found that teachers who succeeded in maintaining relatively high job satisfaction and perceived their relationships with students positively were still teaching full-time. Teachers with relatively high job satisfaction who perceived their relationships with students less positively had chosen to do other tasks outside of teaching. Teachers with relatively low job satisfaction mainly referred to factors concerning the school context. An example is lack of support from the school board. Only after we asked specifically about their relationships with students did these teachers admit that they had problems with this relationship too. They reported that they no longer felt capable of realizing their aspirations regarding the relationship with students. Because the relationship with students is a major source of motivation for being a teacher and job satisfaction (e.g., Grayson & Alvarez, 2008; Sinclair et al., 2006; Spilt et al., 2011; Tatar & Horenczyk, 2003),

it might be painful to admit to no longer being able to realize a positive teacher-student relationship.

We distinguished four groups of teachers in our sample: two groups who had realized their aspirations in their teacher-student relationships (one with relatively high job satisfaction and one with relatively low job satisfaction), and two groups who had not realized their aspirations in their teacher-student relationships (again, one with relatively high job satisfaction and one with relatively low job satisfaction).

Four teachers in our sample had succeeded in realizing their aspirations in their teacher-student relationships. All had full-time teaching tasks. They all mentioned the importance of having good relationships with students as the major source of their job satisfaction. This finding is in line with the findings of earlier research (Byrne, 1999; Friedman, 2006; Grayson & Alvarez 2008; Spilt et al., 2011), which showed that positive relationships with students are a major source of motivation for teachers. Three of these teachers had relatively high job satisfaction as well. In terms of Hargreaves's (2005) typology, these are the teachers who are able to keep finding new challenges within and beyond their classrooms. They belong to the group of veteran teachers distinguished by Day and Gu (2010) who remain motivated, as a result of good teacher-student relations and student results. In general, these teachers feel capable of developing the teacher-student relationships they would like to have. In terms of the Job Demands-Resources (JD-R) Model (Xanthopoulou et al., 2007), the personal job demands (creating positive teacher-student relationships) are in equilibrium with the personal job resources (realizing aspirations and self-efficacy in their teacher-student relationships) for these teachers. One teacher who succeeded in realizing his aspirations in teacher-student relationships nevertheless reported having relatively low job satisfaction. He mentioned contact with students as a major source of his job satisfaction, but his severe problems with the school management negatively influenced this. He belongs to the group of veteran teachers, distinguished by Day and Gu (2010), who have lost their motivation. In terms of Hargreaves's (2005) typology he is a positive focuser: he concentrates his efforts on his classes. In terms of the Job Demands-Resources (JD-R) Model, this teacher shows a balance between the personal demand of creating positive teacher-student relationships and the personal resources of realizing his aspirations and self-efficacy in teacher-student relationships. However, there seems to be a lack of balance in other job resources such as supervisory support and social climate (e.g., Friedman, 1991).

Eight of the 12 teachers did not succeed in realizing their aspirations in the teacher-student relationship. Four nevertheless had relatively high job satisfaction. These teachers felt that the quality of their relationships with students was lower than in the past. They no longer felt capable of creating their ideal teacher-student relationships. Three had chosen to adjust their working conditions to this new situation by working part-time and engaging in other tasks at school or outside school. In doing this, they managed to be positive focusers (Hargreaves, 2005). In terms of the Job Demands-Resources (JD-R), by diminishing their teaching tasks, they managed to keep a good balance between, on the one hand, the personal demands of creating positive teacher-student relationships

and, on the other hand, the personal resources of realizing their aspirations and self-efficacy in the teacher–student relationship. Perhaps if they had received more support in coping with the difficulties they experienced in teacher–student relationships in this phase of their career, they would not have reduced their teaching tasks. One teacher, who taught full-time, admitted that he had less energy nowadays. He had withdrawn from all other tasks at school besides teaching. In Hargreaves's (2005) terms, he is a negative focuser. According to the Job Demands–Resources (JD–R) Model, he did not find the right balance between the personal demands of creating positive teacher–student relationships and the personal resources of realizing his aspirations and self-efficacy in the teacher–student relationship; he dealt with this imbalance by focusing on the importance of another job resource: the joy derived from his school subject, in which he was in control.

The four teachers who had not succeeded in realizing their aspirations in the teacher–student relationship and had relatively low job satisfaction, referred to private circumstances (bad health), governmental measures (educational reforms), and problems with the school board. They belong to the group of veteran teachers who has lost their motivation (Day & Gu, 2010). They had all withdrawn from all other tasks at school besides teaching. In Hargreaves's (2005) terms, they are negative focusers. When asked explicitly about the quality of their teacher–student relationships, these teachers reported that they did not manage to create the relationships with students that they would like because they feared losing control in class; they were stricter than they would like to be. In terms of the Job Demands–Resources (JD–R) Model, they did not manage to keep a balance between the personal demands of creating positive teacher–student relationships and the personal resources of realizing their aspirations and self-efficacy in the teacher–student relationship. For the source of their low job satisfaction, these teachers referred to the lack of supervisory support and inadequate social climate (e.g., Friedman, 1991).

4.1 Limitations

In spite of its valuable outcomes, this study has some limitations with respect to the generalizability of the outcomes. Sample size is one limitation; another is that we administered the general questionnaire on teachers' self-efficacy (Mainhard et al., 2008; Tschannen-Moran & Woolfolk Hoy (2001). Items that are specifically focused on the quality of the teacher–student relationship are lacking in the three scales of self-efficacy. In the interviews, the teachers provided more detailed information on their self-efficacy which was not captured using the questionnaire. For example, teachers who did not realize their aspirations in the teacher–student relationships mentioned elements from their personal lives as causes for being less successful in creating a positive relationship with their students: for instance, no longer having their own children living at home made it more difficult for them to empathize with students. In addition, some of them mentioned the influence of the school context on their self-efficacy, such as a lack of support from the school board.

4.2 Conclusion

Using the Job Demands–Resources (JD–R) model (Demerouti et al., 2001), including personal demands and resources (Xanthoupoulo et al., 2007), in the current study helped us get a better understanding of the relationship between teachers' aspirations for creating positive teacher–student relationships (personal demands) and realizing these aspirations and self-efficacy (personal resources). We found that teachers who do not manage to keep a balance between these personal demands and resources, and who nevertheless have a large teaching task, have relatively low job satisfaction.

The findings of this study reveal that it might be important to take into account the quality of teacher–student relationships, as perceived by the teachers, in the discussion about the job satisfaction of veteran teachers. Teachers who are not succeeding in realizing their aspirations in the teacher–student relationship report that they don't feel capable of doing so. Based on our results, it might be worthwhile to pay attention to teacher–student relationships in the guidance of veteran teachers. Through supporting these teachers in coping with the growing gap between themselves and their students, these teachers might be helped to develop strategies to realize their aspirations in these relationships. Moreover, more veteran teachers might continue teaching, instead of reducing their teaching tasks as soon as they see an opportunity to do so. In this way, teaching experience and expertise are retained, and students can benefit longer from these experienced teachers.

CHAPTER 4

Measuring teachers' interpersonal self-efficacy:
relationship with realized interpersonal aspirations,
classroom management efficacy, and age⁶

ABSTRACT

In this study, we present the development and validation of an instrument for measuring teachers' interpersonal self-efficacy: the Questionnaire on Teacher Interaction - Self-Efficacy (QTI-SE). We used the Questionnaire on Teacher Interaction (QTI) as a basis to construct items. Current scales on teacher self-efficacy in classroom management cover interpersonal self-efficacy mostly indirectly or focus specifically on efficacy in conveying relatively high levels of teacher agency (e.g., the teacher's ability to maintain or restore classroom discipline). The QTI-SE is an instrument for measuring teachers' interpersonal self-efficacy more comprehensively and in a reliable and valid way.

1. INTRODUCTION

Working with children or adolescents is central to the teaching profession in many ways. It is a reason to enter the profession (Sinclair et al., 2006), but, when interpersonal relationships are poor, also a source of work stress for many teachers (Spilt, Koomen, and Thijs, 2011). Teachers usually have high aspirations regarding the interpersonal aspect of the teaching profession. However, not all teachers feel able to realize these aspirations (Veldman, Admiraal, Mainhard, Van Tartwijk, and Wubbels, 2016). Teachers' confidence in their ability to realize these aspirations can be regarded as a constituent part of their self-efficacy.

Research on teachers' self-efficacy has shown its association with variables such as student achievement, pre-service and in-service teacher commitment (Chesnut and Burley, 2015), teachers' feelings of burnout (Tschannen-Moran and Woolfolk Hoy, 2001, 2007; Woolfolk Hoy and Davis, 2006), and teachers' willingness to adopt and implement reform efforts (Wheatley, 2000, 2002). However, teachers' interpersonal self-efficacy, i.e., their self-efficacy in building and maintaining interpersonal relationships with students that are positive and conducive to student learning, has received little attention in spite of the central role of interpersonal processes for teachers' job satisfaction and well-being (Spilt, Koomen, and Thijs, 2011) and for classroom processes in general (Wubbels et al., 2014). While some researchers have focused specifically on teachers' self-efficacy in classroom management (Tschannen Moran, 2001) and self-efficacy in classroom discipline control (Friedman, 2003), to our knowledge no study exists which directly targets the interpersonal self-efficacy of teachers. However, Veldman, Admiraal, van Tartwijk, Mainhard, and Wubbels. (2016) found a discrepancy between teachers' self-efficacy measured using the classroom management subscale of the Teacher Sense of Efficacy Scale (TSES; Tschannen Moran, 2001) and interpersonal self-efficacy as reported in in-

6 This chapter is based on Veldman, I., Admiraal, W., Mainhard, T., Van Tartwijk, J., Wubbels, T. (2017). Measuring teachers' interpersonal self-efficacy: Relationship with realized interpersonal aspirations, classroom management efficacy and age. *Social Psychology of Education*, DOI 10.1007/s11218-017-9374-1.

interviews, showing that many teachers who felt they were able to correct disruptive student behavior (i.e., a high score on the classroom management scale of the TSES) also reported that they did not feel able to realize a positive relationship with their students. The aim of the current study was to introduce and test a measure of teacher self-efficacy in interpersonal behavior in class.

1.1 Teacher self-efficacy

Bandura (1986, 1997, 2006) defined self-efficacy as “people’s judgments of their capabilities to organize and execute courses of action required to produce given attainments” (p. 3): self-efficacy can be understood as an individual’s beliefs about what he or she can do successfully (Bong, 2006). In regard to teaching, Dellinger, Bobbett, Olivier, and Ellett (2008) defined teacher self-efficacy as teachers’ “beliefs in their capabilities to perform specific teaching tasks at a specified level of quality in a specified situation” (p. 752).

Accordingly, in recent decades, instruments for measuring teacher self-efficacy have been focused on teachers’ beliefs about effective teaching behaviors, such as whether a teacher feels able to “plan activities that accommodate the range of individual differences among my students” (Dellinger et al., 2008), “use my students’ cultural background to help make learning meaningful” (Siwatu, 2007), and “assist families in helping their children do well in school” (Tschannen-Moran and Woolfolk Hoy, 2001). Several studies have shown strong relationships between teacher self-efficacy, on the one hand, and student performance and learning (Armor et al., 1976; Goh and Fraser, 2000; Guskey, 1982, 1988; Tschannen-Moran and Woolfolk Hoy, 2001; Woolfolk Hoy and Burke Spero, 2005). Strong relationships between teacher self-efficacy and occupation-related outcomes have also been found for teachers’ commitment (Chesnut and Burley, 2015; Coladarci, T., 1992; Klassen et al., 2011), burnout (Kunter, Frenzel, Nagy, Baumert, and Pekrun, 2011; Saalvik and Saalvik, 2007), job satisfaction (Tschannen-Moran and Woolfolk Hoy, 2001, 2007; Woolfolk Hoy and Davis, 2006; Caprara, Barbaranelli, Borgogni, and Steca, 2003; Kunter et al., 2011; Vieluf, Kunter, and van de Vijver, 2013), and teachers’ willingness to adopt and implement reform efforts (Wheatley, 2000, 2002). In a review study, Zee and Koomen (2016) found that -irrespective of pre- or in-service context, grade level, or country- self-efficacious teachers suffer less from stress and burnout, and experience higher levels of personal accomplishment, commitment, and job satisfaction. Klassen and Chui (2010) found that teacher self-efficacy developed nonlinearly with years of experience: Teacher self-efficacy regarding engaging students, managing student behavior, and using effective instructional strategies increased in teachers’ early and mid-career stages, and declined in the late career stages.

Because of the importance of interpersonal processes in class for motivation for the teaching profession (Sinclair et al., 2006), and job satisfaction (Grayson and Alvarez, 2008; Day et al., 2006; Hansen, 1995; OECD, 2005; Sinclair et al., 2006), it is important to focus self-efficacy research specifically on teachers’ interpersonal self-efficacy as well.

1.2 Interpersonal processes in class and teachers' aspirations

Grayson and Alvarez (2008) found that teachers who succeed in maintaining positive interpersonal contact with their students are more likely to stay motivated and enthusiastic in their job and enjoy their work. In line with this, Gu (2014) found that mutually positive perceptions of interpersonal processes in class and trust in teacher-student relationships has been considered a primary source of teachers' long-term job fulfillment and resilience, through which teachers feel that their hard work is rewarded and valued by students. Moreover, the quality of interpersonal processes in class has been found to be positively related to teachers' job satisfaction (Grayson and Alvarez, 2008; Day et al., 2006; Hansen, 1995; OECD, 2005; Sinclair et al., 2006). Problems with classroom management have a negative impact on teachers' job satisfaction (e.g., Spilt, Koomen, and Thijs, 2011; Grayson and Alvarez, 2008).

Interpersonal theory (Horowitz and Strack, 2011) provides a framework for describing interpersonal relationships and processes. This theory posits that two independent dimensions, which have consistently been found in research, are both necessary and sufficient to describe interpersonal processes and relationships (Horowitz and Strack, 2011; Kiesler, 1983). The two meta-labels for these dimensions are agency and communion. The agency dimension concerns social influence and control and ranges from dominance to submissiveness. The communion dimension concerns communion and warmth and ranges from agreeable to quarrelsome (Fournier, Moskowitz, and Zuroff, 2011). The two dimensions can be combined using a circumplex, the interpersonal circle (IPC). The IPC is a weighted combination of levels of agency and communion (Wiggins, 1979). For example, while strong leadership or being directing reflects high agency and moderately high communion, uncertainty can be described as conveying low levels of agency and moderately low levels of communion. Wubbels, Cr  ton, and Hooymayers (1985) adapted the IPC to the classroom context (the IPC-teacher, formerly also referred to as the Model for Interpersonal Teacher Behavior; Wubbels, Brekelmans, Den Brok, and Van Tartwijk, 2006). In the IPC-teacher, agency and communion underlie eight prototypical interpersonal messages teachers may convey in class (being directing, helpful, understanding, and so on; see Figure 4.1).

The Questionnaire on Teacher Interaction (QTI) was developed based on the IPC-teacher (Wubbels et al., 1985; Wubbels et al., 2006). The QTI taps students' perceptions and teachers' self-perceptions of levels of teacher agency and communion in the relationship with his or her students. The QTI consists of eight scales that each refers to a specific octant of the IPC-teacher. Items in these scales take the form of statements about the teacher, such as "This teacher is friendly" (octant 2, Helpful) or "This teacher is strict" (octant 8, Imposing). In some studies by Wubbels and his colleagues, scores on the two underlying dimensions, agency and communion, were used to analyze the teacher-student relationship (Wubbels et al., 2006). In these studies, scale scores corresponding to the octants were converted linearly to dimension scores.

The QTI can also be used to measure teachers' self-perceptions and ideal perceptions with respect to how they behave interpersonally in class. Ideal perceptions can be seen as teachers' aspirations, and the difference between teachers' ideal perceptions and their self- or student perceptions can be understood as the degree to which teachers realize these aspirations. Brekelmans, Wubbels, and van Tartwijk (2005) found in a longitudinal study that, on average, teachers' aspirations appeared to be rather stable for both agency and communion. Teachers' realizations of their aspirations (i.e., the difference between teachers' ideals and student perceptions) on the agency dimension increased during the first 10 years of teaching and then leveled off. Brekelmans et al. (2005) explained the growth of the degree of realized aspirations on the agency dimension as owing to the age and experience of the teachers. The average age of beginning teachers is 20 to 25 years; they usually do not have much experience in leadership roles and may, therefore, lack the behavioral repertoire that would allow them to have agency in class. With regard to the communion dimension, Brekelmans et al. (2005) found a small decrease in realized aspirations at the end of the career for the average of their population. Wubbels et al. (2006) explained this as owing to the growing distance, in age and emotionally, between older teachers and their students. Teachers may become less connected with students' lifestyles and, therefore, become more dissatisfied with student behavior (i.e., low communion), possibly leading students to perceive less teacher communion. The danger exists that these teachers may feel required to act in more demanding and confrontational ways, thereby creating a negative interpersonal climate in class and disrupting relationships with students.

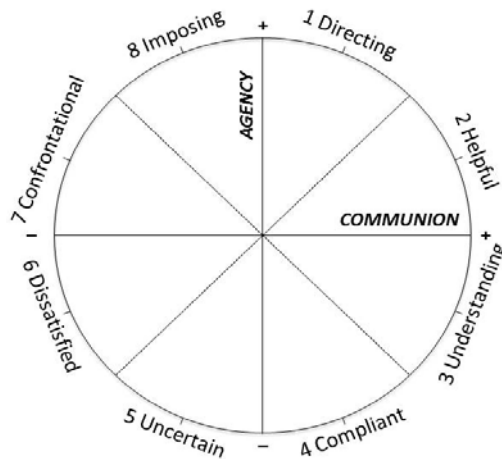


Figure 4.1 The Interpersonal Circle for the Teacher (cf. Wubbels, et al., 2006; Wubbels et al. 2012)

Investigations of the relationship between teacher self-efficacy and interpersonal processes in class show mixed results (Zee and Koomen, 2016); high scores for teacher self-efficacy are not always correlated with high scores on the quality of teachers' relationships with individual students. These ambiguous findings may be partly due to the variety of selected outcome variables and methods of data analysis in the examined studies (Zee and Koomen, 2016).

Because of the importance to teachers of realizing their aspirations regarding interpersonal aspects of teaching, it is necessary to assess teachers' interpersonal self-efficacy.

1.3 The current study

In the current study, we present the development of an instrument for measuring teachers' interpersonal self-efficacy, which we refer to as the Questionnaire on Teacher Interaction Self-Efficacy (QTI-SE). Existing scales on teacher self-efficacy (e.g., Teachers' Sense of Efficacy Scale, Tschannen Moran and Woolfolk Hoy, 2001; Teacher Classroom Efficacy Scale, Friedman, 2003) cover interpersonal self-efficacy only indirectly and items often focus specifically on efficacy in conveying relatively high levels of teacher agency (e.g., the teacher's ability to maintain or restore classroom discipline). Especially conveying communion and building positive relationships is underrepresented in existing scales. The development of the QTI-SE was based on themes and items used in the QTI (Wubbels et al., 1985; Wubbels et al. 2006; Wubbels, Brekelmans, Den Brok, Levy, Mainhard, and Van Tartwijk, 2012); the process is explained below.

First, in order to examine its predictive validity, the newly developed QTI-SE was related to the difference in scores on the teachers' ideal- and self-perceptions with respect to teacher agency and communion. Ideal perceptions can be considered as teachers' aspirations regarding interpersonal aspects of teaching. In the current study, the difference between teachers' self- and ideal perceptions was used to (indirectly) tap the degree to which teachers believed they realized their aspirations regarding interpersonal aspects of teaching. We expected that the higher the scores on the QTI-SE, the smaller the difference would be between teachers' QTI self- and ideal perceptions. The first research question was:

1. To what extent is teachers' interpersonal self-efficacy related to teachers' realized aspirations in the relationship with their students?

Second, we checked the concurrent validity of the QTI-SE. For this, we used the 'classroom management' subscale of the Teachers' Sense of Efficacy Scale (TSES), (Tschannen Moran and Woolfolk Hoy, 2001) and the subscales 'classroom discipline control' and 'classroom consideration' of Friedman's Teacher Classroom Efficacy scale (Friedman, 2003). The classroom discipline control scale focuses on self-efficacy in classroom management, and the classroom consideration scale on showing empathy, attention, and care for students.

We expected moderate positive associations of the QTI-SE with the selected scales. More specifically, we expected a high association between the QTI-SE agency dimension scores and the scores on TSES and the subscale Classroom discipline control, and a high association between the QTI-SE communion dimension scores and the scores on the subscale Classroom consideration. The second research question was:

2. To what extent is teachers' interpersonal self-efficacy related to their self-efficacy with respect to classroom management, classroom discipline control, and classroom consideration?

Third, differential validity was evaluated. Klassen and Chui (2010) found that younger and veteran teachers reported lower self-efficacy than teachers in their mid-career. Therefore, we expected relatively low scores on beginning and veteran teachers' interpersonal self-efficacy compared with the scores of mid-career teachers. The third research question was:

3. To what extent do younger teachers and veteran teachers report lower interpersonal self-efficacy, compared with teachers in mid-career?

2. METHODS

2.1 Sample

To select teachers for this study, we requested the collaboration of 15 school boards of professional development schools in the western part of the Netherlands. The boards invited their teachers to participate in our research. All schools were schools for secondary education. Participation was on a voluntary basis and it was made clear that teachers could opt out at any time. Two rounds of data collection were established. In the first round, in the context of a study among veteran teachers, we purposefully collected data among teachers older than 55 years. In the second round, we collected additional data among teachers younger than 55 years. In total, 223 teachers (25 younger than 28 years, 88 from 29 to 54, and 110 older than 55 years) participated (113 male, 100 female). The scores of four teachers were deleted from further analyses as these were not complete.

2.2 Instruments

We used three instruments to validate our newly developed instrument for measuring teachers' interpersonal self-efficacy: the Teachers' Sense of Self-efficacy (TSES), the Teacher Classroom Efficacy Scale (TCES), and the Questionnaire on Teacher Interaction (QTI). The descriptive statistics for these measurements are presented in Table 4.1.

Table 4.1 Descriptives of variables

	Range	Min	Max	M	SD
QTI: Realized aspirations agency	2.88	-2.10	0.78	-0.32	0.45
QTI: Realized Aspirations communion	2.81	-2.07	0.74	-0.54	0.48
TSES - Classroom management	3.00	2.00	5.00	4.02	0.51
TCES - Classroom Control	4.00	1.00	5.00	3.89	0.64
TCES - Classroom consideration	2.86	1.86	4.71	3.76	0.48

Teachers' Sense of Self-efficacy (TSES).

A Dutch translation (Mainhard, 2008) of the classroom management subscale of the short Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran and Woolfolk Hoy, 2001) was used. This subscale includes the following items: 1) "How much can you do to control disruptive behavior in the classroom?", 2) "How much can you do to get children to follow classroom rules?", 3) "How much can you do to calm a student who is disruptive or noisy?", and 4) "How well can you establish a classroom management system with each group of students?". Items were rated on a five-point scale ranging from "nothing" to "very much". The reliability of the scale in this sample in terms of Cronbach's α was 0.82.

Teacher Classroom Efficacy Scale (TCES).

We translated Friedman's subscales Classroom discipline control and Classroom consideration (Friedman, 2003) into Dutch (forward-backward translation) and piloted the resulting items with 30 teachers who were not included in the current sample. Example items of the classroom discipline control scale (3 items) are: "I believe I easily overcome student interruptions in class" and "I believe I handle classroom discipline problems quite well" (Cronbach's $\alpha = 0.77$). Example items of the Classroom consideration scale (8 items) are: "I believe I have the ability to encourage students to express their thoughts and feelings freely in my class" and "I believe I am flexible and adaptive in my relations with my students" (Cronbach's $\alpha = 0.78$). Items were rated on a five-point scale ranging from "never" to "always". The two scales were positively correlated (with $r = .50$, $p < .01$, $N = 219$).

Questionnaire on Teacher Interaction (QTI).

To measure teachers' realized aspirations with respect to their interpersonal relationships with their students, teachers were asked to complete the self-perception and ideal perception part of the short version of the QTI (Mainhard, 2008, 2015; Pennings et al. 2014). The instruction for ideal perceptions was "how do you want to teach this class?", and the instruction for self-perceptions was "how do you think you are teaching in this class?". The version of the QTI used here consisted of 24 items rated on a five-point scale

from “never” to “always”. Example items are “this teacher is strict” and “this teacher is uncertain”. The QTI has a circumplex structure; therefore, each item was weighted separately for each of the two underlying dimensions, agency and communion, depending on the position of an item on the IPC (see the introduction for a description of the transformation of scale to dimension scores). For ideal perceptions, Cronbach's α was 0.67 for Agency and 0.81 for Communion; for self-perceptions, Cronbach's α was 0.80 and 0.84, respectively.

2.3 Development of the Questionnaire on Teachers' Interpersonal Self-Efficacy (QTI-SE).

We used a 24-item version of QTI (Mainhard, 2008, 2015) as a basis to construct items to measure teachers' interpersonal self-efficacy. We used the items belonging to those five octants of the IPC-T (octants 1 through 4 and 8) which have been found to have a positive association with cognitive and/or affective student outcomes (den Brok, Brekelmans, and Wubbels, 2004, 2006; Brekelmans, 2010; Mainhard, 2008, 2015). Moreover, Wubbels et al. (2006) summarized research findings which show that the link between teacher-student relationships and student outcomes are characterized by a rather high degree of teacher agency and communion (octants 1 and 2, see Figure 4.1). Brekelmans (1989) found a positive relationship between the dimension communion and student motivation (represented especially by the octants on the right of the IPC, see Figure 4.1). Finally, Brekelmans, Sleegers, Fraser, and den Brok (2000) found a positive relationship between the agency dimension and student perceptions of teacher activation of learning activities. We crafted items intended to tap teachers' interpersonal self-efficacy based on the 15 QTI items concerning five octants of the IPC, three items for each octant: 1) directing, 2) helpful, 3) understanding, 4) compliant, and 8) imposing (see Table 1 for an overview of all items). These items were rated on a five-point scale, ranging from “never” to “always”. See the results section for a further description of the questionnaire.

3. RESULTS

3.1 Construct validity and reliability

An exploratory factor analysis was conducted on the 15 items intended to measure teachers' interpersonal self-efficacy, following the recommendations of Costello and Osborne (2005). Maximum likelihood was used as an extraction method with oblique (oblimin) rotation and eigenvalues > 1 as general criteria for factor selection, but taking into account a scree-test as well. A general expectation was that factors related to the dimensions of agency and communion would emerge. The analysis indicated three factors accounting for 49% of the variance in teachers' ratings. The first factor accounted for

31% of the variance, the second factor for 14%, and the third factor for only 4% of the total variance. An overview of all items included in the analysis and their factor loadings is provided in Table 4.2. As a criterion for including an item in a scale, a minimum loading of .50 and a maximum cross-loading of .30 was chosen.

Four items loading on factor 1 scored high on teacher agency, and four items loading on factor 2 were interpreted as reflecting the communion dimension. The two items loading on factor 3 reflected low scores on the teacher agency dimension in combination with moderate scores on the communion dimension. Given the low explained variance and small number of items it was decided to remove both items loading on factor 3 from further analyses. The five items with double loadings on the factors were also not included in further analyses. Reliabilities in terms of Cronbach's α for both scales were satisfactory: Agency dimension 0.80 (with items 5, 6, 10, and 15) and Communion dimension 0.78 (with items 2, 3, 12, and 13). The descriptives of the variables included are presented in Table 4.2.

3.2 Predictive validity

Our first research question regarding the predictive validity of the QTI-SE focused on the relationship between the QTI-SE and teachers' realized aspirations. As indicated in the method section, the realized aspirations with respect to relationship with students was measured using the difference between teachers' self- and ideal perceptions in the QTI. As expected, we found a significant negative relationship between the teachers' interpersonal self-efficacy (scores on the agency and communion dimensions of the QTI-SE) and teachers' realized aspirations in their relationships with students (difference between ideal and self-perceptions). The correlation for agency was $r=0.49$; for communion, $r=0.38$ (see Table 4.3).

3.3 Concurrent validity

Our second question focused on the relationship between teachers' interpersonal self-efficacy (indicated by the two dimension scores of the QTI-SE), on the one hand, and the Classroom management subscale of the TSES (Tschannen Moran and Woolfolk Hoy, 2001) and the subscales Classroom discipline control and Classroom consideration of the TCES (Friedman, 2003), on the other hand. We found positive correlations between the scores on the QTI-SE dimension agency, on the one hand, and the scores on the TSES subscale Classroom management ($r=0.65$) and Friedman's TSEC-scale Classroom discipline control ($r=0.58$), on the other hand. We also found a positive correlation between the scores on the QTI-SE communion scale and the scale scores of Classroom consideration ($r=0.64$). Overall, these results confirmed our expectations regarding the concurrent validity of the QTI-SE. See Table 4.3 for all correlations.

Table 4.2 Factor Loadings for Teacher Interpersonal Self-efficacy Items and Means, Standard Deviations, Pearson's Correlations, and Internal Reliabilities for the Resulting Factors

Items QTI-SE	Factor		
	1	2	3
1. I am capable of giving good guidance to students (d)	.34	.50	-.34
2. I can inspire trust in students (h)		.73	
3. I am capable of being patient with students (u)	-.25	.53	
4. I am capable of letting students do what they want (c)		.28	.43
5. I am capable of setting a norm to guide what students may and may not say (i)	.78		
6. I am capable of showing my authority in class (d)	.64	.26	
7. I can use my sense of humor when interacting with students (h)		.48	
8. I can empathize with students (u)	.30	.28	.26
9. I am capable of giving students their way (c)			.61
10. I am capable of demanding silence in class (i)	.73		
11. I can behave confidently in class (d)	.43	.44	-.26
12. I can create a pleasant atmosphere in class (h)		.60	
13. I am capable of interacting with students with flexibility (u)		.80	
14. I am capable of tolerating a lot from my students (c)		.25	.54
15. I am capable of keeping strict order (i)	.72		
Factor mean (<i>SD</i>); range 1-5 (based on bold-printed loadings)			
Cronbach's alpha			
Correlations			
Agency	.80		
Communion		.78	
Cronbach's alpha			
Correlations			
Agency	.80		
Communion		.78	

Note 1. d=directing i=imposing; u=understanding; h=helpful; c=compliant (see Figure 1.)

Note 2. N = 219, bold-printed factor loadings were considered acceptable for inclusion. * p < .05.

Table 4.3 Bi-variate correlations between QTI-SE (agency and communion) and realized aspirations, classroom management, classroom control, and classroom consideration.

	QTI-SE Agency	QTI-SE Communion
QTI: Realized aspirations agency	.49*	.27
QTI: Realized Aspirations communion	.06	.38*
TSES - Classroom management	.65*	.46*
TCES - Classroom Control	.58*	.33
TCES – Classroom Consideration	.39	.64*

3.4 Differential validity

Our third research question focused on the relationship between teachers' interpersonal self-efficacy and their ages: to what extent do younger teachers and veteran teachers receive lower scores on both QTI-SE dimensions, compared with teachers in mid-career? Independent t-tests for the mid-career group (aged between 28 and 55) showed that the mean scores of this age group did not differ significantly from those of either the younger (age 28 or younger) or veteran group (age 55 or older), neither on the agency dimension ($t(107) = -0.39$; $p = 0.70$) and $t(193) = -1.48$; $p = 0.14$), respectively) nor on the communion dimension ($t(107) = -0.18$; $p = 0.86$ and $t(193) = -0.22$; $p = 0.83$, respectively). Inspection of the regression plots did not suggest that alternative groupings with regard to age would result in significant differences. (See Tables 4.4 and 4.5).

4. DISCUSSION

The aim of this study was to introduce and test an instrument for measuring teachers' interpersonal self-efficacy. Although the importance of interpersonal processes (Grayson and Alvarez, 2008; Day et al., 2006; Hansen, 1995; OECD, 2005; Sinclair et al., 2006; Spilt, Koomen, and Thijs, 2011) and teacher self-efficacy (Caprara, Barbaranelli, Borgogni, and Steca, 2003; Kunter et al., 2011; Vieluf, Kunter, and van de Vijver, 2013; Woolfolk Hoy, 2001, 2007; Woolfolk Hoy and Davis, 2006; Wheatley, 2000, 2002; Zee and Koomen, 2016) for many teachers and for student outcomes has been acknowledged, no instrument that can be used specifically to measure teachers' interpersonal self-efficacy was available.

We used the Interpersonal Circle for the teacher (IPC-teacher) (Wubbels, Creton, and Hooymayers, 1985) and the 24version of the Questionnaire on Teacher Interaction (QTI) (Mainhard, 2008, 2015) as a starting point for the development of the QTI-SE.

The QTI-SE includes only items that correspond with items from the QTI that have been found to have a positive relationship with cognitive or affective student outcomes

Table 4.4 QTI-SE (Agency and Communion and teachers' age (mid-career (28-55), younger (≤ 28) and veteran (≥ 55))

	Younger teachers ≤ 28 – Mid-career teachers 28-55	Veteran teachers ≥ 55 – Mid-career teachers 28-55
T agency	-.39	1.48
Df agency	107	193
Sig (2tailed) agency	.70	.14
T communion	-.18	-.22
Df communion	107	193
Sig (2tailed) communion	.86	.83

Table 4.5 T- test QTI-SE (Agency and Communion and teachers' age (mid-career (28-55), younger (≤ 28), and veteran (≥ 55))

	Younger teachers ≤ 28	Mid-career teachers 28-55	Veteran teachers ≥ 55
Mean Score Agency	3.85	3.91	4.04
SD	.70	.59	.60
Mean Score Communion	4.20	4.22	4.20
SD	.51	.48	.44
n	24	85	110

(den Brok, Brekelmans, and Wubbels, 2004, 2006, Brekelmans, 2010). This means that we used five of the eight octants of the QTI. Factor analyses showed the underlying dimensions of the IPC-teacher on which the QTI is based: agency and communion. Eight items were included in the QTI-SE, four in the agency scale and four in the communion scale.

To validate the QTI-SE we examined its predictive validity, its concurrent validity, and its differential validity. First, a moderate positive correlation was found between the agency and communion scores of the QTI-SE and teachers' realized aspirations in their relationships with their students (as indicated by the difference scores between the self- and ideal perceptions of the teacher-student relationships on both dimensions. Second, moderate positive correlations were also found between the QTI-SE dimension scores and the subscale Classroom management of the TSES (Tschannen-Moran and Woolfolk Hoy, 2001) and the subscales Classroom control and Classroom consideration of the teacher classroom efficacy scale (TCES) (Friedman, 2003). These correlations support the predictive and concurrent validity of the QTI-SE. Finally, we did not find any significant relationship between the scores on the QTI-SE dimensions agency and communion and

teachers' age. A possible explanation for this is that a decline in teachers' self-efficacy might occur for only a part of the population; this is certainly the case for the communion aspirations of veteran teachers (Brekelmans et al., 2005). Some teachers are able to keep up high levels of teacher-student communion until the end of their careers (Veldman et al., 2013, 2016). These teachers might very well be more inclined to participate in research, too, which brings us to a limitation of our study.

As we employed a convenience sample in the current study, it is possible that teachers who, for example, experienced problems in interpersonal processes and might as a result have low interpersonal self-efficacy, did not participate. However, the bias of this self-selection is limited, as this would be the case for all our measurements.

Further research could elaborate on this research by selecting other teachers and other variables to deepen our insight into the role of self-efficacy for teaching quality and for teachers' job satisfaction and well-being during their entire careers. In particular, future research investigating the predictive validity of the QTI-SE might focus on the relationship between teachers' interpersonal self-efficacy and student performance, building on former research which has revealed that teacher-student relationships characterized by a rather high degree of teacher agency and communion (octants 1 and 2, see Figure 1) have been found to have a positive association with cognitive and/or affective student outcomes (den Brok, Brekelmans, and Wubbels, 2004, 2006; Brekelmans, 2010; Mainhard, 2008, 2015).

The QTI-SE is an instrument for measuring teachers' interpersonal self-efficacy in a reliable and valid way. The QTI-SE is an addition to the Classroom management subscale of the TSES (Tschannen Moran and Woolfolk Hoy, 2001) and the subscales Classroom discipline control and Classroom consideration of the TCES (Friedman, 2003). Whereas the TSES focuses on classroom management, and the TCES focuses on classroom management and classroom consideration, the QTI-SE looks more closely at the aspects of interpersonal self-efficacy, focusing on the two dimensions underlying teacher-student relationships: agency and communion.

In the future, the QTI-SE may be a valuable tool to measure teachers' interpersonal self-efficacy, signaling potential problems for beginning as well as experienced teachers.

CHAPTER 5

A typology of veteran teachers' job satisfaction: their relationships with their students and the nature of their work⁷

ABSTRACT

This study developed a typology of veteran teachers, based on their interpersonal relationships with their students and their job satisfaction, to identify what groups of teachers exist and how they differ from one another. We found differences in the extent to which veteran teachers had realistic perceptions of their relationships with students: two types of veteran teachers, one satisfied and one dissatisfied, overestimated their relationships, whereas one type of dissatisfied veteran teachers underestimated this relationship. Just one type of dissatisfied teachers had realistic self-perceptions of their relationships with students.

1. INTRODUCTION

Low job satisfaction is an important cause of teacher attrition (Bobbitt, Faupel, and Birns, 1991; Perrachione, Rosse, and Petersen, 2008). Several studies reveal that teacher burnout and attrition rates are relatively high for both beginning and veteran teachers compared with mid-career teachers, and that attrition rates rise sharply during the late career (Borman and Dowling, 2008; Guarino, Santibaz, and Daley 2006; Harris & Adams, 2007; Ingersoll and May, 2012). Dropout of veteran teachers is not only a personal drama; impending teacher shortages in many countries are problematic, too. The teacher work force is ageing (OECD, 2005, 2012), and this means greater understanding is needed of the determinants of job retention and job satisfaction among veteran teachers. Many factors might influence teachers' job satisfaction. Research indicates that interpersonal relationships with students in class may be an important, yet under-investigated, factor in teachers' job satisfaction (Betoret, 2006; Chang, 2009; Klassen and Chui, 2010; Kyriacou, 2001; Spilt, Koomen, and Thijs, 2011). For veteran teachers in particular, the relationship between job satisfaction and interpersonal processes in class seems to be complex. In a study among twelve veteran teachers (Veldman, Admiraal, Van Tartwijk & Wubbels, 2016) found that veteran teachers' job satisfaction appeared to be positively associated with the extent to which they realized their aspirations in their relationships with students. Teachers who had failed to realize their interpersonal aspirations reported either relatively low job satisfaction or a reduced number of activities directly related to teaching in order to avoid being confronted with negative teacher-student relationships and, consequently, feelings of low job satisfaction and distress. It is well known that students' and teachers' perceptions of teachers' relationships with students are not always aligned (Veldman, Van Tartwijk, Brekelmans, M., & Wubbels, 2013; Brekelmans, Mainhard, den Brok, & Wubbels, Th, 2012; Wubbels, Brekelmans,

7 This chapter is based on Veldman, I., Admiraal, W., Mainhard, T., & Van Tartwijk, J. A Typology of Veteran Teachers' Job Satisfaction: their relationships with their students and the nature of their work. (submitted for publication).

den Brok, & Van Tartwijk, 2006). Some teachers perceive their relationship with students more positively than their students, and others more negatively.

In order to understand the complex relationship between veteran teachers' relationships with their students and their job satisfaction, and to ultimately support these teachers and keep them satisfied with teaching, we took a person-centred approach in this study (cf. Asendorpf, 2013). Our aim was to develop a typology of veteran teachers, based on both their interpersonal relationships with their students and their job satisfaction, to identify what groups of teachers exist and how they differ from one another. Ultimately, knowledge of these teacher types may be helpful for developing interventions targeted at specific groups of veteran teachers with the aim of sustaining or improving their job satisfaction.

1.1 Veteran teachers' job satisfaction

Job satisfaction is defined as "a pleasurable condition of a positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p.1300), and is the result of a personal assessment of one's work and work experiences. Dinham and Scott (1998) classified sources of teachers' job satisfaction into three domains: (a) intrinsic rewards of teaching, (b) factors extrinsic to the school, and (c) school-based factors. The intrinsic rewards of teaching concern the actual work of teaching, working with the students, and seeing students learn and develop, which are all primary motives for becoming a teacher and a main source of satisfaction among teachers (Scott, Stone, & Dinham, 2001). Factors extrinsic to the school include externally imposed educational change, external evaluation of schools, negative portrayal of teachers in the media, and a decrease in the status of teaching. School-based factors or contextual variables at school include relations with colleagues, parents, and the school leadership, as well as time pressure, disruptive student behavior, and the values emphasized at the school.

Teachers are mainly driven by intrinsic motivations, such as the desire to teach and help children (Brookhart & Freeman, 1992; OECD, 2005; Struyven, Jacobs, & Dochy, 2013), which refer to the 'nature of work' as defined by Van der Ploeg and Scholte (2003). Grayson and Alvarez (2008) found that teachers who succeeded in maintaining positive relationships with their students were more likely to stay motivated and enthusiastic in their jobs and enjoy their work. These findings are in line with other studies showing that the interpersonal relationships that teachers maintain at work contribute significantly to the prediction of burnout (e.g., Cano-García, Padilla-Muñoz, & Carrasco-Ortiz, 2005; Dorman, 2003; Friedman, 2003; Gavish & Friedman, 2010; Grayson et al., 2008; Green-glass & Burke, 2003; Skaalvik & Skaalvik, 2009, 2011). Moreover, Van Droogenbroek, Spruijt, and Vanroelen (2014) found that different interpersonal relationships (with students, parents, colleagues, and supervisors) at work do not have a similar impact on burnout: the relationship with students was the most important one.

In their *Vitae* study, Day and colleagues (Day & Gu, 2010; Day, Stobart, Sammons, Kington, Qing, Smees, et al., 2006) investigated teachers' well-being in all phases of the career, including veteran teachers. They focused on the variations in teachers' lives, work, and effectiveness in different phases of their careers. Whereas some teachers who had exceptionally long teaching careers (over 31 years) kept up their motivation for, and stayed satisfied with, the teaching profession, others were tired and lost their commitment to teaching. As causes of their poor job satisfaction, veteran teachers referred to policy measures, private circumstances (such as poor health), the massive paperwork burden, long working hours, and work load in general. These factors mostly relate to school and the teaching profession in general, which are called extrinsic factors by Dinham et al. (1998). Yet the rewards from good student outcomes and good teacher-student relationships were the most important factors for those veteran teachers who stayed satisfied in the profession. These factors refer to the intrinsic rewards of teaching, according to Dinham et al. (2001).

1.2 Interpersonal relationships of teachers with their students

To examine interpersonal relationships between teachers and students, Wubbels and his colleagues (Wubbels, Créton, and Hooymayers 1992) developed the Questionnaire on Teacher Interaction (QTI). The QTI can be regarded as an operationalization of the Interpersonal Circle (Horowitz & Clarke, 2011) applied to the teacher (see Wubbels, Brekelmans, den Brok, Levy, Mainhard, and Van Tartwijk, 2012). Underlying this interpersonal circle are two independent dimensions that have been proven to be both necessary and sufficient to describe perceptions of the interpersonal meaning of behavior: agency (the amount of dominance or interpersonal influence) and communion (the warmth or affiliation in interpersonal contact) (Wubbels et al., 2012). The QTI can be used to tap student perceptions as well as teachers' self- and ideal perceptions of teacher agency and communion.

In a longitudinal study, Brekelmans, Wubbels, and Van Tartwijk (2005) found that, in general, teachers' ideal self-perceptions of their relationships with students are rather stable throughout their careers for both agency and communion. Yet teachers' self-perceptions and students' perceptions of teacher agency increased during the first 10 years of teaching and then leveled off. These authors also found, on average, a small decrease in self-perceived communion throughout teachers' careers.

In an in-depth study among twelve veteran teachers (see chapter 3), we found discrepancies between teachers' ideals for their interpersonal relationships with students and how they perceived these relationships in class. The teachers mentioned the growing age gap between themselves and the students as a cause of this discrepancy between ideal and self-perceptions. Wubbels et al. (1992) investigated the differences between teachers' self-perceptions, teachers' ideal perceptions, and students' perceptions of teachers' interpersonal relationships with students in class, among 143 teachers. They found that the differences between teachers' ideal perceptions and student perceptions

were the most distinct. They also found important differences between teachers' self- and ideal perceptions for most teachers, and concluded that most teachers do not believe they have reached their personal ideal. Comparing the three types of perceptions, Wubbels et al. (1992) found that the self-perceptions of two-thirds of the teachers were positioned between their ideal and the students' perceptions. They interpreted this as 'wishful thinking' of the teacher, which may have the function of reducing cognitive dissonance (Festinger, 1957). The remainder of the teachers perceived their own behavior as conveying even less agency and communion than students did. Wubbels et al. (1992) suggested that these teachers may be protecting themselves from disappointment, which might result from confrontation with students whose perceptions are more negative than their own.

1.3 The aim of the current study

The current study was focused on unravelling the complex relationship between veteran teachers' job satisfaction and their relationships with their students. We use the term *interpersonal aspirations* for teachers' ideal perceptions of their relationships with their students. The degree to which teachers realize these interpersonal aspirations can be conceived of as the difference between their ideal and self-perceptions (Veldman et al., 2016). The degree to which teachers have accurate self-perceptions is the difference between teachers' self-perceptions of their relationships with their students and how students perceive their relationship with their teacher.

The aim of this study was to understand how veteran teachers' interpersonal aspirations, their realized aspirations, and the interpersonal perceptions of their students combine with their job satisfaction. These insights might help in developing specific measures for coaching different types of veteran teachers and maintaining their job satisfaction. Several typologies of (veteran) teachers exist, such as the four types of dominant career trajectories of Hargreaves (2005) and the distinctions of Day and his colleagues (2006). These typologies are solely based on teachers' motivation and job satisfaction. Given the central role of teacher-student relationships in the profession in general (Betoret, 2006; Chang, 2009; Klassen and Chui, 2010; Kyriacou, 2001; Spilt, Koomen, and Thijs, 2011) and in veteran teachers' job satisfaction specifically (see chapter 2 and 3), interpersonal aspects of the teaching profession are a potentially valuable addition to existing categorizations aimed at capturing types of veteran teachers. Our former findings (see chapter 2 and 3) were based on small samples and qualitative methods. In the present study, we developed profiles of veteran teachers based on a larger sample, including characteristics of teachers' interpersonal relationships with their students and their job satisfaction. We used the following variables related to the teacher-student relationship: realized interpersonal aspirations (the difference between teachers' aspirations - ideal perceptions - and self-perceptions) and accuracy of self-perceptions (the difference between teachers' self-perceptions and students' perceptions). Our study was guided by the following research question: What types of veteran teachers can be distinguished based on their

realized interpersonal aspirations with students, the accuracy of their self-perceptions of their interpersonal relationships with students, and their satisfaction with the nature of their work?

2. METHODS

2.1 Sample

To get into contact with teachers, we requested the collaboration of the school boards of fifteen professional development schools in the western part of the Netherlands. The boards invited their veteran teachers (older than 54 years) to participate in our research. All schools were schools for secondary education. Participants were informed about the aims of the study, and it was made clear that participation was voluntary and that teachers could opt out any time. In total, 168 teachers participated (112 males, 56 females). The data of 36 teachers had to be excluded from further analyses, because these were incomplete.

2.2 Measures

To develop a typology of veteran teachers, we collected data about veteran teachers' ideal perceptions and self-perceptions of their relationships with their students, their students' perceptions of these interpersonal relationships, their job satisfaction, and their feelings of interpersonal self-efficacy. Teacher self-efficacy has been found to be related to job satisfaction (Tschannen-Moran and Woolfolk Hoy, 2001, 2007; Caprara, Barbaranelli, Borgogni, and Steca, 2003; Vieluf, Kunter, & van de Vijver, 2013).

Ideal, self-, and student perceptions of the interpersonal relationship

Ideal, self-, and student perceptions of the interpersonal relationships were measured using the 24-item Dutch version of the Questionnaire on Teacher Interaction (QTI-24; e.g., Mainhard, 2015). The QTI is used to measure perceptions of the teacher which are indicative of teacher-student relationships. Items take the form of statements about the teacher, for example, "This teacher is friendly" and "This teacher gets angry quickly". Answers were provided on a 5-point Likert-type scale bounded by 1= "never" and 5= "always". Students and teachers completed identical questionnaires, albeit with different instructions printed on the form. Students answered the questions on how they generally perceived their teacher during class (student perceptions of the interpersonal relationship with their teacher); teachers answered the questions on how they thought they usually taught that class (self-perceptions) and on their personal ideals (ideal perceptions). Brekelmans et al. (2011) showed, using a large sample, that the 24 items in these versions are scaled in a comparable way on the two underlying dimensions Agency and Communion. The reliabilities of the scales in terms of Cronbach's α for Agency

were .81(self-perceptions), .68 (ideal perceptions), and .72 (student perceptions); and for Communion .87 (self-perceptions), .83 (ideal perceptions), and .90 (student perceptions).

Table 5.1 Descriptive statistics

	Mean	SD	Min.	Max.	N*
Relationship with students					
Realized aspirations agency	0.23	0.37	-0.82	1.52	157
Realized aspirations communion	0.48	0.50	-0.83	2.20	157
Accuracy self-perceptions agency	0.10	0.42	-0.99	1.02	132
Accuracy self-perceptions communion	0.11	0.54	-1.52	1.32	132
Self-perceptions agency	0.73	0.46	-0.80	1.87	157
Self-perceptions communion	1.16	0.48	-0.45	2.12	157
Ideal perceptions agency	0.96	0.35	-0.06	1.92	157
Ideal perceptions communion	1.64	0.41	0.28	2.34	157
Student perceptions agency	0.61	0.31	-0.18	1.33	154
Student perceptions communion	1.03	0.47	-0.99	1.88	154
Job satisfaction					
Nature of work	4.22	0.66	1.50	5.00	157
Management support	3.87	0.70	1.50	5.00	157
Autonomy	3.72	0.69	1.50	5.00	157
Relationship with colleagues	3.84	0.66	1.67	5.00	157
Working conditions	3.25	0.95	1.17	5.00	157

* 157 teachers completed the ideal and self-perceptions questionnaire; 132 of these teachers administered the student questionnaire; and 22 teachers administered only the student questionnaire.

The two main variables of this study, teacher agency and communion, relating to the teacher-student relationship are based on the perceptions measured using the QTI. First, scores on veteran teachers' realized interpersonal aspirations with their students were calculated as the difference between teachers' ideal and self-perceptions; the lower the score, the closer teachers realized their aspirations. Second, scores on accuracy of the self-perceptions of veteran teachers' interpersonal relationships with their students were calculated as the difference between self-perceptions and student perceptions; the more closely scores approach 0, the more accurate teachers' self-perceptions are, with positive scores indicating overestimation and negative scores underestimation. We present the descriptive statistics for all variables in Table 5.1.

Teachers' job satisfaction

We used the Dutch Job Satisfaction Index (ASI; Van der Ploeg and Scholte, 2003) to measure five basic aspects of teachers' job satisfaction: 1) nature of work (challenge, opportunities to use one's capabilities), 2) management support (appropriate guidance and appreciation from the school management), 3) autonomy (freedom to make own choices, joint decision making), 4) relationship with colleagues, and 5) working conditions (salary, holidays). The aspect Nature of work is congruent with intrinsic rewards of teaching (Scott et al., 2001). Sample items for Nature of work are: "In my work I have sufficient opportunities to use my knowledge and skills" and "My work is a real challenge for me". The other four aspects of the Job Satisfaction Index are related to what Dinham et al. (2001) label extrinsic factors (i.e., working conditions) and school-based factors (i.e., relationship with colleagues, management support, and teachers' autonomy). Examples of items of these four scales are "I feel supported by my school leader" (management support), "I have a lot of freedom in my work" (autonomy), "I have the feeling that my colleagues appreciate my work" (relationship with colleagues), and "My salary is too low given the work I'm doing" (working conditions). All answers were provided on a five-point Likert-type scale, ranging from 1= "very unsatisfied" to 5= "very satisfied". The reliabilities of the scales in terms of Cronbach's α are $\alpha = 0.81$ (Nature of work), $\alpha = 0.78$ (Management support), $\alpha = 0.81$ (Autonomy), $\alpha = 0.80$ (Relationships with colleagues), and $\alpha = 0.86$ (Working conditions).

Teachers' interpersonal self-efficacy

The Questionnaire on Teacher Interaction-Self-Efficacy (QTI-SE; Veldman et al., 2017) was developed to measure teachers' self-efficacy in their relationships with students. The QTI-SE is based on QTI-24 and consists of eight items: four items measuring teachers' self-efficacy on the Agency dimension (for example, "I'm capable of determining what students can and cannot say in class") and four items on the Communion dimension (for example, "I'm capable of tolerating a lot from my students"). Veteran teachers completed the items of the QTI-SE on a 5-point Likert-type scale with 1= "never" and 5= "always". Reliabilities in terms of Cronbach's α are 0.72 for self-efficacy on the agency dimension and 0.81 for self-efficacy on the communion dimension.

2.3 Analyses

In order to develop a typology of veteran teachers' interpersonal relationships and job satisfaction, we conducted analyses in two stages. First, we performed cluster analysis with veteran teachers' realized interpersonal aspirations, the accuracy of their self-perceptions of the teacher-student relationship, and their satisfaction with the nature of their work as input variables. With respect to teachers' job satisfaction, we used the Nature of Work subscale of the ASI, because we were particularly interested in sources of job satisfaction related to the intrinsic rewards of teaching (Scott et al., 2001). Second,

we used descriptive statistics, χ^2 -tests and univariate analyses of variance, and the remaining variables to further describe the typology that resulted from stage 1.

In the cluster analysis of stage 1, we decided to use the (squared) Euclidean distance as the similarity measure. Seven hierarchical clustering methods and one partitioning method (k-means) that are available in SPSS-version 24 were evaluated. In order to ascertain the optimal cluster analysis method for our data, we used the Variance Ratio Criterion (VRC, see Calinski & Harabasz, 1974). This criterion refers to the ratio of the “within variance” (variance explained by the clusters) and “between variance”, corrected for the number of clusters and responses. The solution with the highest VRC score was the four-cluster solution with K-means. We therefore decided to present a typology of four clusters of veteran teachers.

In stage 2, descriptive statistics for the four clusters were calculated and χ^2 -tests and univariate analyses of variance were performed to examine the relationships of these four clusters and the other variables concerning the interpersonal relationship (self-perceptions of the agency dimension (S_{Ag}), self-perceptions of the communion dimension (S_{Co}), ideal perceptions of the agency dimension (I_{Ag}), ideal perceptions of the communion dimension (I_{Co}), student perceptions of the agency dimension (St_{Ag}), and student perceptions of the communion dimension (St_{Co})), the four other scales of job satisfaction (autonomy (AU), relationships with colleagues (RC), working conditions (WC) and support (SU)), self-efficacy on the agency dimension (SE_{Ag}), self-efficacy on the communion dimension (SE_{Co}), and teachers' background information (the number of hours they teach, their age and gender). Post-hoc Scheffé tests were conducted to explore the differences between each pair of clusters for all dependent variables.

3. RESULTS

In Table 5.2 the mean scores, standard deviations, and number of teachers are presented for each of the four clusters of teachers. For realized interpersonal aspiration in agency and communion, 34% of the variance was explained by the clustering into four groups; for accuracy in agency, this was 35%; and for accuracy in communion, 63%. For Nature of Work the explained variance was 66%. This means that the latter two variables can be considered the most influential in the labeling of the four types of veteran teachers.

Table 5.2 Means and Standard Deviations (between brackets) for Realized interpersonal aspiration, Accuracy of self-perception and Satisfaction with the nature of work

	Cluster 1 (N=57)	Cluster 2 (N= 12)	Cluster 3 (N= 47)	Cluster 4 (N= 16)	Total (N=132)
Realized aspiration					
Agency	0.09 (0.30)	0.89 (0.41)	0.24 (0.32)	0.17 (0.27)	0.23 (0.38)
Communion	0.34 (0.40)	1.32 (0.57)	0.53 (0.41)	0.13 (0.36)	0.47 (0.51)
Accuracy					
Agency	0.34 (0.31)	-0.46 (0.35)	-0.04 (0.34)	0.09 (0.42)	0.10 (0.42)
Communion	0.56 (0.27)	-0.62 (0.50)	-0.25 (0.31)	0.14 (0.42)	0.11 (0.54)
Nature of work					
	4.52 (0.27)	3.09 (0.74)	4.46 (0.33)	3.34 (0.48)	4.23 (0.64)

For the four clusters, we examined the relationships of the typology with self-perceptions, ideal perceptions, and student perceptions in terms of Agency (Ag) and Communion (Co) and the four other aspects of job satisfaction (management support, autonomy, relationships with colleagues, and working conditions). We also examined the relationship with teachers' interpersonal self-efficacy. All variables showed a significant relationship with the typology of veteran teachers. No significant relationships were found between typology and background information (number of hours teaching per week, age, and gender). In Table 5.3, we present for each cluster the descriptive statistics on the other variables concerning interpersonal relationships, the other scales of the Job Satisfaction Index, and teachers' interpersonal self-efficacy. Below, we present the four types of veteran teachers based on the cluster analysis and the relationships with the additional variables.

3.1 CLUSTER 1: Positive over-estimators (N=57)

The veteran teachers in this cluster are characterized by their relatively high satisfaction with the nature of their work (see Table 5.2) and relatively high scores on the other aspects of job satisfaction (see Table 5.3). Generally, these teachers perceived the teacher-student relationship more positively than their students did, in particular in terms of communion (accuracy communion $M=0.56$). This overestimation was mainly due to the relatively high scores for self-perceptions of the interpersonal relationship with students ($M= 0.95$ and 1.48 for Agency and Communion, respectively, see Table 5.3). Moreover, teachers in this cluster generally realized their interpersonal aspirations particularly in terms of agency ($M=0.09$), and less so in terms of communion ($M=0.34$), mainly because

of the relatively high mean score on self-perceptions. The scores on realized aspirations were similar to those of teachers from clusters 3 and 4 (post-hoc Scheffe $p > .05$). Finally, teachers in this cluster generally believed they were able to realize good relationships with their students, particularly on the communion dimension ($M = 4.40$; see Table 5.3).

Table 5.3 Mean scores and standard deviations (between brackets) for Self, Ideal and Student perception (Ag and Co), Self-efficacy (Ag and Co) and other scales of Job Satisfaction (Management support, Autonomy, Relationships with colleagues, Working Conditions)

	Cluster 1 N = 57	Cluster 2 N = 12	Cluster 3 N = 47	Cluster 4 N = 16	Total N = 132
Self perception					
Agency	0.95 (0.39)	0.17 (0.53)	0.64 (0.39)	0.53 (0.47)	0.72 (0.48)
Communion	1.48 (0.34)	0.38 (0.49)	1.02 (0.38)	1.10 (0.38)	1.17 (0.49)
Ideal Perception					
Agency	1.04 (0.29)	1.06 (0.35)	0.88 (0.37)	0.70 (0.42)	0.95 (0.36)
Communion	1.82 (0.30)	1.70 (0.35)	1.55 (0.37)	1.24 (0.37)	1.64 (0.39)
Student Perception					
Agency	0.61 (0.34)	0.63 (0.31)	0.68 (0.26)	0.44 (0.26)	0.62 (0.31)
Communion	0.92 (0.45)	1.00 (0.64)	1.27 (0.33)	0.97 (0.41)	1.06 (0.45)
Self-Efficacy					
Agency	4.17 (0.58)	3.73 (0.70)	4.04 (0.46)	3.80 (0.61)	4.04 (0.57)
Communion	4.40 (0.49)	3.96 (0.42)	4.52 (0.37)	4.16 (0.52)	4.24 (0.47)
Job Satisfaction					
Management support	4.03 (0.61)	3.18 (0.78)	3.96 (0.54)	3.35 (0.90)	3.85 (0.70)
Autonomy	3.84 (0.67)	3.01 (0.59)	3.87 (0.54)	3.23 (0.54)	3.70 (0.67)
Relationships with colleagues	3.83 (0.63)	3.36 (0.89)	4.00 (0.55)	3.72 (0.43)	3.83 (0.63)
Working Conditions	3.34 (0.89)	2.65 (0.56)	3.39 (0.94)	2.74 (0.83)	3.22 (0.91)

3.2 CLUSTER 2: Negative under-estimators (N= 12)

Veteran teachers in this cluster were characterized by a rather low mean score on satisfaction with the nature of their work ($M = 3.09$), which was significantly lower than that of teachers in clusters 1 and 3. The mean scores on the other four aspects were also relatively low. Moreover, these teachers generally perceived their relationships with students more negatively than their students did ($M = -0.46$ for agency and $M = -0.62$ for communion, respectively). This was mainly due to their relatively low scores on self-perceptions of the interpersonal relationship (see Table 5.3). With respect to their realized

interpersonal aspirations, teachers in this cluster generally believed that they did not realize their interpersonal aspirations. There were relatively large differences between ideal and self-perceptions ($M = 0.89$ for agency and $M = 1.32$ for communion, respectively), mainly caused by the relatively low mean score on self-perceptions. In both accuracy of self-perceptions and realized interpersonal aspirations, this type of teachers showed significantly lower accuracy and realization than the three other types (all Scheffe post-hoc statistics with $p < .05$). Finally, the teachers in this cluster generally had the lowest interpersonal self-efficacy on both dimensions compared with the teachers in the other clusters (Ag $M = 3.73$ and Co $M = 3.96$). They differed significantly from the *positive over-estimators* on the communion dimension ($p < .05$).

3.3 CLUSTER 3: Positive under-estimators (N=47)

Similar to the teachers from cluster 1, these veteran teachers were characterized by a rather high score on satisfaction with the nature of their work ($M = 4.46$; see Table 5.2), which was significantly different from the scores of the teachers of clusters 2 and 4 (Scheffe post-hoc $P < .05$). This high score was confirmed by the relatively high mean scores on the other four aspects of job satisfaction. Moreover, these teachers generally underestimated themselves: student perceptions were more positive than their self-perceptions, especially on the communion dimension ($M = -0.25$), albeit significantly less than for cluster 2 teachers (Scheffe post-hoc difference $p < .05$). This underestimation was mainly caused by relatively high mean scores on student perceptions (see Table 5.3). With respect to the teachers' realized interpersonal aspirations, we see in Table 5.2 mean scores for both agency ($M = 0.24$) and communion ($M = 0.53$), which did not differ significantly from the scores in clusters 1 and 4 (Scheffe post-hoc $p > .05$). Finally, these teachers also showed average mean scores on interpersonal self-efficacy (see Table 5.3).

3.4 CLUSTER 4: Negative realists (N= 16)

The veteran teachers of this cluster were characterized by a rather low score on satisfaction with the nature of their work ($M = 3.34$), similar to that of the teachers of cluster 2. This low score was confirmed by the relatively low scores on the other four aspects of job satisfaction, especially on satisfaction with working conditions and autonomy (see Table 5.3). Moreover, the differences between self-perceptions and student perceptions were rather small for both dimensions ($M = 0.09$ for agency and $M = 0.14$ for communion), showing relatively accurate self-perceptions. Scores were relatively low on both self-perceptions and student perceptions (see Table 5.3). With respect to their realized interpersonal aspirations, the differences between ideal and self-perceptions were rather small for both dimensions ($M = 0.17$ for agency and $M = 0.13$ for communion); in general, they seemed to realize their interpersonal aspirations in the teacher-student relationship. This finding was similar to that for cluster 1 teachers, although cluster 4 teachers showed significantly lower scores on ideal perceptions (Scheffe post-hoc $P < .05$). Finally,

these teachers generally had low interpersonal self-efficacy on agency ($M = 3.80$), and moderate interpersonal self-efficacy on communion ($M = 4.16$).

4. DISCUSSION AND CONCLUSION

Previous findings showed that relatively more veteran teachers experience burnout and that attrition rates rise sharply for later-career teachers. Low job satisfaction seems to be one of the main causes, and teachers' relationships with their students appear to be related to job satisfaction in both positive and negative ways. In a study among 12 veteran secondary school teachers, we found (see chapter 3) that veteran teachers' job satisfaction appeared to be positively related to the extent to which these teachers realized their aspirations in their relationships with their students. Moreover, it was clear that their perceptions of their relationships with students did not always coincide with their students' perceptions of those relationships. In the current study, we developed a typology of veteran teachers based on indicators of their job satisfaction, their realized interpersonal aspirations, and the accuracy of their own perceptions of their relationships with their students. Four types of veteran teachers were distinguished. These are labeled and described below.

4.1 Positive over-estimators

In general, *positive over-estimators* perceived relationships with students more positively than their students. These veteran teachers had high interpersonal aspirations, especially on the communion aspect, which they do not realize. The high interpersonal aspirations emphasize the importance of the intrinsic rewards of teaching for these teachers, a source of job satisfaction according to Scot et al. (2001). In terms of Day and his colleagues (2006), these veteran teachers, like the *positive under-estimators*, remain satisfied because of the rewards of, among other things, good teacher-student relationships.

Failure to realize their aspirations could have a negative influence on these teachers' job satisfaction. However, in general, these teachers feel able to realize good relationships with their students. This group of teachers is quite satisfied with all aspects of their job. They might practice what Wubbels and colleagues call "wishful thinking" (Wubbels et al., 2006): they overestimate the quality of their performances, which may have the function of reducing cognitive dissonance (Festinger, 1957). In general, these teachers, like the *positive under-estimators*, are satisfied with all aspects of their job, especially the relationship with colleagues and working conditions.

4.2 Positive under-estimators

Positive under-estimators generally have more negative perceptions of their relationships with their students than their students have. They have moderate interpersonal

aspirations and self-perceptions, in both agency and communion, which means that they generally realize their interpersonal aspirations only to a limited extent. Not realizing some aspects of the intrinsic rewards of teaching (Dinham et al, 1998) could have a negative influence on these teachers' job satisfaction. However, this group of teachers view their behavior more negatively than their students do and so they underestimate the quality of their performances. They seem to be protecting themselves against potential disappointment resulting from confrontation with negative students' perceptions (cf. Wubbels et al., 2006).

4.3 Negative under-estimators

In general, *negative under-estimators* have very low self-perceptions of their relationships with their students, resulting in under-estimation because of their average students' perceptions. These teachers also show high aspirations in their relationships with their students, which means that – owing to their low self-perceptions- these teachers generally do not realize their interpersonal aspirations. In line with these findings, they do not feel able to realize good relationships with students. Not realizing these aspects of the intrinsic rewards of teaching (Scott et al, 2001) could have a negative influence on these teachers' job satisfaction. Moreover, these teachers experience low satisfaction in all aspects of their job. Similar to the *positive under-estimators*, these *negative under-estimators* might be protecting themselves against disappointment; they seem to be less successful in this, given their low job satisfaction. In terms of Day et al. (2006), these veteran teachers, like the *negative realists*, are unsatisfied teachers who score high on extrinsic and school-based factors as causes for their dissatisfaction.

4.4 Negative realists

Negative realists generally have accurate perceptions of their relationships with their students: both self-perceptions and students' perceptions are quite negative. These teachers realize their interpersonal aspirations, mainly because their aspirations in the teacher-student relationship are low. Nevertheless, they do not feel able to realize good relationships with their students, especially on the aspect of agency. Because of their low interpersonal aspirations, it seems that these aspects of the intrinsic rewards of teaching (Scott et al., 2001) are less important factors for these teachers' job satisfaction. Like the *negative under-estimators*, these teachers are also unsatisfied with all other aspects of their job.

4.5 Implications

The typology of veteran teachers based on their interpersonal relationships with students and their feelings of job satisfaction gives us a better understanding of the differences between veteran teachers and how to support them in remaining or becoming

more satisfied in their jobs. For the unsatisfied teachers, and the *negative under-estimators* in particular, support from the school board through coaching and training could be beneficial. Coaching of the *negative under-estimators* could be focused on adjusting their interpersonal aspirations to a more realistic level, and adjusting their self-perceptions to the level of the interpersonal perceptions of their students, in order to promote these teachers self confidence. In addition, training in interpersonal skills may help them to increase their interpersonal self-efficacy. The situation of the *negative realists* seems to be more severe; they have low interpersonal aspirations, they are close to realizing these aspirations, and their self-perceptions are as negative as the perceptions of their students. Coaching in their case could be focused on “the intrinsic rewards of teaching” (Scott et al. 2001): why do you want to be a teacher, what is your motivation for this occupation, even at the end of your career? More specifically, coaching could focus on adjusting the interpersonal aspirations in a positive way. If this coaching is successful, training may help these teachers to increase their interpersonal self-efficacy.

The two groups of satisfied teachers could also benefit from coaching and training, to prevent them from becoming dissatisfied. The *positive over-estimators* run the risk of becoming dissatisfied if their “wishful thinking” mechanism fails. Coaching focused on adjusting their interpersonal aspirations to a more realistic level could help prevent this. Finally, the *positive under-estimators* could be supported through coaching focused on increasing their self-esteem by adjusting their interpersonal self-perceptions to the level of their students' perceptions. Training could support them in increasing their interpersonal self-efficacy.

4.6 Limitations and future research

The veteran teachers in this study participated voluntarily. More males (67 % of the participants) than females participated in this study, whereas more females teach in Dutch secondary schools (53 % secondary female teachers in 2015; OECD, 2016). Second, we might have missed information from veteran teachers who have severe problems in their teacher-student relationships and/or have low job satisfaction, because such teachers would perhaps be less motivated to participate. We also lacked information from veteran teachers who had already dropped out. As a next step, the typology of veteran teachers that we have developed in the current study should be validated in a broader spectrum of participants, including more female veteran teachers and also including these groups of (former) unsatisfied teachers.

Future research is also needed in the development and evaluation of coaching and training instruments aimed at veteran teachers and the various aspects of their relationships with students: interpersonal aspirations, self- and student perceptions, and interpersonal self-efficacy.

CHAPTER 6

General Conclusions

Teacher burnout and attrition rates are relatively high for both beginning and veteran teachers compared with mid-career teachers, and attrition rates rise sharply for many teachers who are approaching retirement (Borman and Dowling, 2008; Guarino, Santibaz, and Daley 2006; Harris & Adams, 2007; Ingersoll and May, 2012). Not only because of the personal drama this may represent for individual teachers, but also because of the impending teacher shortages in many countries, this is problematic. As the teacher work force is ageing (OECD, 2005, 2012), a better understanding is needed of the factors involved in veteran teachers' job retention and job satisfaction.

Besides work overload, low job status, unreasonable demands of school administrators, and disruptive student behavior (Betoret, 2006; Chang, 2009; Day, 2006; Klassen and Chui, 2010; Kyriacou, 2001), poor relationships with students also have a significant impact on teachers' job satisfaction (Spilt, Koomen & Thijs, 2011). Relationships with students are an important motivation to become a teacher and to stay in the profession (Sinclair, Dowson, & Mcinerney, 2006), and can be positively related to teachers' job satisfaction (Grayson & Alvarez, 2008).

More knowledge of the association between veteran teachers' job satisfaction and their relationships with students is important to improve our understanding of the causes of veteran teacher attrition. The central aim of this dissertation was to investigate the association between veteran teachers' job satisfaction and their relationships with students. The overarching research question addressed in this dissertation was: How is veteran teachers' job satisfaction associated with the different aspects of teachers' relationships with students?

In this concluding chapter, we present the main findings of the four separate studies of this dissertation, followed by some reflections, implications, and directions for future research.

1. FINDINGS OF THE FOUR STUDIES

In the first two studies, we used a multiple case-study approach to explore the experiences of veteran teachers in their relationships with students, and the association of these relationships with their job satisfaction. In the first study, we found that veteran teachers' perceptions of their relationships with students were indeed potentially important for their job satisfaction. In the second study, we identified teachers' interpersonal self-efficacy as a potentially important factor for veteran teachers' job satisfaction. In the third study, we developed and validated an instrument to measure especially teachers' interpersonal self-efficacy. In the fourth study, we established a typology of veteran teachers, based on their perceptions of their relationships with students and their job satisfaction.

1.1 Job satisfaction and teacher-student relationships across the teaching career: four case studies

This study addressed the research question: “How are teacher-student relationships related to job satisfaction during the careers of four teachers who managed to maintain high job satisfaction until the end of their careers?” In the literature, we found various career choices of veteran teachers (Day et al., 2006; Hargreaves, 2005; Huberman, 1993): from avoiding classroom teaching as much as possible to full-time teaching with pleasure. We recognized these choices among the four teachers in our study. They all emphasized the importance of good relationships with students during their careers. We also found a correspondence between veteran teachers’ job satisfaction and their relationships with students: in periods when they perceived their relationships as less good, they also experienced less job satisfaction.

Based on previous research into students’ perceptions of teachers’ interpersonal behavior throughout teachers’ careers (Brekelmans et al., 2005), the general expectation would be that teacher agency (or teacher interpersonal influence in the classroom) is rather stable throughout teachers’ mid- and late careers, whereas communion (the warmth or affiliation in interpersonal contact) tends to decline somewhat in the last stages of the career. However, the four veteran teachers in our study, who all had a relatively high job-satisfaction, had higher scores on agency at the end of their careers than during earlier phases of their careers. The scores for communion of the four veteran teachers were also relatively higher at the end of their careers than during earlier phases. We also found a positive relation between these teachers’ job satisfaction and the self-reported quality of the teacher-student relationship at the start of the career; and for three of the four teachers we also observed that positive relation near the end of the career. Note that teachers’ positive reports about the teacher-student relationship sometimes differed from student perceptions of that relationship.

In this study, we learned that there seemed to be an association between veteran teachers’ job satisfaction and their relationships with their students: in periods when they perceived less job satisfaction they also perceived less good relationships with their students.

1.2 Veteran teachers’ job satisfaction as a function of personal demands and resources in the relationships with their students

The second case study, conducted among twelve veteran teachers, addressed the following research question: “How do veteran teachers’ aspirations, their realized aspirations, and self-efficacy with respect to the relationship with their students, relate to their job satisfaction?”

We distinguished four groups of veteran teachers in our sample: two groups who had realized their aspirations in their teacher–student relationships (one group with relatively high job satisfaction and one with relatively low job satisfaction), and two groups

who had not realized their aspirations (again, one group with relatively high job satisfaction and one with relatively low job satisfaction). In terms of the Job-Demands Resources model (JD-R model, Demerouti et al., 2001), the groups of satisfied teachers managed to keep a balance between, on the one hand, the personal demand (Xanthopoulos et al., 2007) of creating positive teacher–student relationships and, on the other hand, the personal resources of realizing their aspirations and self-efficacy in the teacher–student relationship. Three of the four teachers in the group with low job satisfaction and who had not realized their aspirations in their relationships with students, had chosen to minimize their teaching tasks and to engage in other tasks in and outside the school instead. One teacher, who still taught full-time, admitted that he had less energy than before. He had withdrawn from all other tasks at school besides teaching. In terms of the JD–R model, he had not found the right balance between the personal demands of creating positive teacher–student relationships and the personal resources of realizing his aspirations and self-efficacy in the teacher–student relationship. He dealt with this imbalance by focusing on the importance of another job resource: the joy derived from teaching his school subject, an activity in which he felt in control. The four veteran teachers who formed this group referred to private circumstances (e.g., bad health), educational reforms, and problems with the school board as reasons for their low job satisfaction. When asked explicitly about the quality of their relationships with their students, these teachers reported that they had not managed to create the relationships with students that they would have liked, because they feared that doing so would mean losing control in class. In terms of the JD–R model, they had not found the right balance between the personal demands of creating positive teacher–student relationships and the personal resources of realizing their aspirations and self-efficacy in the teacher–student relationship.

In this study, we learned that satisfied veteran teachers felt a balance between the personal demand of creating positive relationships with students and the personal resources of realizing aspirations in their relationships with students and interpersonal self-efficacy. We found that the results from existing questionnaires measuring more general teaching self-efficacy were not congruent with the interpersonal self-efficacy reported in the interviews.

1.3 Measuring teachers' interpersonal self-efficacy

The aim of the third study was to develop and evaluate an instrument for measuring teachers' interpersonal self-efficacy. We refer to this instrument as the Questionnaire on Teacher Interaction Self-Efficacy (QTI-SE). The development of the QTI-SE was based on themes and items used in the QTI (Wubbels et al., 1985; Wubbels et al., 2006; Wubbels, Brekelmans, Den Brok, Levy, Mainhard, & Van Tartwijk, 2012). We only focused on items that have been found to have a positive relationship with cognitive or affective student outcomes (den Brok, Brekelmans, & Wubbels, 2004, 2006, Brekelmans, 2010). Factor analyses showed the two underlying dimensions of the IPC-teacher on which the

QTI is based: agency and communion. Eight items were included in the QTI-SE, four in the agency scale and four in the communion scale.

To check the predictive, concurrent, and differential validity of this instrument, associations with data on a number of other variables were inspected. This was guided by three research questions: “To what extent is teachers’ interpersonal self-efficacy related to their realized aspirations in the relationship with their students?”; “To what extent is teachers’ interpersonal self-efficacy related to their self-efficacy with respect to classroom management, classroom discipline control, and classroom consideration?”; and “To what extent do younger teachers and veteran teachers report lower interpersonal self-efficacy compared with teachers in mid-career?”

First, a moderate positive correlation was found between the agency and communion scores of the QTI-SE and teachers’ realized aspirations in their relationships with their students (as indicated by the difference scores between the self-perceptions and ideal perceptions of the teacher-student relationships on both dimensions). Second, moderate positive correlations were also found between the QTI-SE scores and the subscale Classroom management of the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) and the subscales Classroom control and Classroom consideration of the teacher classroom efficacy scale (TCES; Friedman, 2002). These correlations supported the predictive and concurrent validity of the QTI-SE. Finally, we did not find any significant relations between the scores on the QTI-SE dimensions agency and communion and teachers’ age, which implies that we were not able to establish the differential validity of the QTI-SE for teacher career timing.

In this study, we developed and evaluated a measure for interpersonal self-efficacy which appeared to be reliable and showed satisfactory predictive and concurrent validity. We have, therefore, introduced a measure of a focused form of self-efficacy, which is important for assessing the quality of the teacher-student relationship and teachers’ job satisfaction.

1.4 A typology of veteran teachers’ job satisfaction: their relationships with their students and the nature of their work

In the fourth study, we developed a typology of veteran teachers based on indicators of their job satisfaction, their realized interpersonal aspirations, and the accuracy of their own perceptions of their relationships with their students, in order to understand the complex relationship between veteran teachers’ relationships with their students and their job satisfaction. We addressed the following research question: “What types of veteran teachers can be distinguished based on their realized interpersonal aspirations with students, the accuracy of their self-perceptions of their interpersonal relationships with students, and their satisfaction with the nature of their work?”

Four types of veteran teachers were distinguished; these were labeled and described as follows: the *positive over-estimators*, the *positive under-estimators*, the *negative under-estimators*, and the *negative realists*. In general, *positive over-estimators* had rather

high job satisfaction and perceived the relationship with their students more positively than their students did. This group of veteran teachers had high interpersonal aspirations, especially on the communion aspect, which, according to their students, they didn't realize. *Positive under-estimators* had rather high job satisfaction and generally had more negative perceptions of the relationship with their students than their students had. They had moderate interpersonal aspirations and self-perceptions, in both agency and communion, and they generally realized their interpersonal aspirations only to a limited extent. In general, *negative under-estimators* had rather low job satisfaction and very low self-perceptions of the relationship with their students. Students perceived the quality of the relationship more positively, resulting in veteran teachers' underestimation. These teachers also showed high aspirations in the relationship with their students, which – in combination with their low self-perceptions- they generally did not realize. They did not feel able to realize a good relationship with students. Moreover, these teachers experienced low satisfaction in all aspects of their teaching job. *Negative realists* had rather low job satisfaction and generally had accurate perceptions of their low-quality relationships with their students. This group of teachers had low aspirations in the teacher-student relationship, and they realized these low aspirations. Nevertheless, they did not feel able to realize good relationships with their students, especially in the aspect of agency.

In this study, we developed a typology of veteran teachers, using various aspects of the veteran teachers' relationships with students (aspirations, realized aspirations, accuracy, and interpersonal self-efficacy) and various aspects of job satisfaction. This typology can be helpful for identifying the different aspects of veteran teachers' relationship with students, in order to adjust the guidance to the specific needs of the veteran teacher.

2. REFLECTIONS

2.1 Theoretical reflections

In this dissertation, we built on the literature on teacher job satisfaction (Dinham and Scott, 1998; Scott, Stone, & Dinham, 2001; Grayson and Alvarez, 2008), teacher-student relationships (Brekelmans, Wubbels, and Van Tartwijk, 2005; Wubbels, Créton, and Hooymayers 1992; Wubbels, Brekelmans, den Brok, Levy, Mainhard, and van Tartwijk, 2012), teacher self-efficacy (Dellinger, Bobbett, Olivier, and Ellett, 2008; Klassen et al., 2011), the interrelations between teacher job satisfaction and teacher-student relationships (Betoret, 2011, 2006; Chang, 2009; Klassen & Chui, 2010; Kyriacou, 2001; Spilt, Koomen, and Thijs), and finally, the relationship between teacher job satisfaction and teacher self-efficacy (Klassen & Chui, 2010). All studies and papers mentioned above focused on teachers in general. This dissertation, however, focused on veteran teachers.

Here we discuss the relationship between job satisfaction and veteran teachers' relationships with students during their careers, the attention given in the literature to the relationship with students as a cause of diminishing job satisfaction, and the need to define and measure teachers' interpersonal self-efficacy in addition to teachers' self-efficacy in general.

In this dissertation, we gained additional insight into the relationship between veteran teachers' job satisfaction and their relationships with students by starting to investigate this association among a limited number of veteran teachers. We found that students perceived the veteran teachers in our study as being higher on the agency and communion dimensions than did students in earlier stages in these veteran teachers' careers. This differs from findings reported by Brekelmans et al. (2005), who found that, on average, perceptions of teacher agency increase sharply during the first years of the teaching career and then stabilize for most teachers. Brekelmans et al. also found that communion remains stable for most teachers throughout the career, although for some teachers there is a decrease towards the end of the career.

Studies of teachers' job satisfaction showed that the quality of teacher-student relationships in class is positively related to teachers' job satisfaction, whereas work overload, low job status, unreasonable demands of school administrators, and disruptive student behavior are often mentioned as major reasons for diminished job satisfaction (Betoret, 2006; Chang, 2009; Day et al., 2007; 2006; Grayson & Alvarez, 2008; Hansen, 1995; Klassen & Chui, 2010; Koomen & Thijs, 2011; Kyriacou, 2001 OECD, 2005; Sinclair et al., 2006). Nevertheless, the quality of relationships with students has received little attention in the discussion about the diminishing of teachers' job satisfaction. In our interviews with dissatisfied veteran teachers, these teachers referred first to causes such as workload and unreasonable demands, and lack of support from school administrators. Only after we asked specifically about their relationships with students and job satisfaction did most dissatisfied veteran teachers report that their relationships with students were less rewarding than in the past. Overall, it is important to take into account the quality of teacher-student relationships in class in the discussion about veteran teachers' job satisfaction.

Based on previous research (Tschannen-Moran & Woolfolk Hoy, 2001, 2007; Woolfolk Hoy & Davis, 2006; Caprara, Barbaranelli, Borgogni, & Steca, 2003; Kunter et al., 2011; Vieluf, Kunter, & van de Vijver, 2013), we expected to find a positive relationship between (veteran) teachers' job satisfaction and their self-efficacy. However, we found that veteran teachers who were relatively dissatisfied and reported rather negative relationships with students, nevertheless had a high score for self-efficacy, measured using the general scale for teachers' self-efficacy (e.g., Teacher Self Efficacy Scale, Tschannen Moran & Woolfolk Hoy, 2001). We therefore defined the concept of interpersonal self-efficacy and developed and validated a new scale for measuring teachers' interpersonal self-efficacy based on the Questionnaire on Teacher Interaction (QTI) (Wubbels et al., 2006): the Questionnaire on Teacher Interaction- Self-Efficacy (QTI-SE).

2.2 Methodological reflections

Here we discuss our samples and data collections, which included a combination of questionnaires and interviews.

The data collections for our studies were convenience samples and the veteran teachers participated voluntarily. This might mean that we missed information from veteran teachers who have severe problems in the relationships with their students and/or have low job satisfaction, because those teachers may be less motivated to participate. We also do not have information from veteran teachers who have already left the profession. It is possible that in study four (chapter 5), particularly the types *negative realists* and *negative under-estimators* would have been more represented if these teachers would have been included. The impression may arise that these types of teachers are a minority, but given the size of the sample and because of the way we recruited our sample, we cannot be sure. In study three, including more dissatisfied teachers could have enriched the validation of the QTI-SE. Ideally, in order to further validate the QTI-SE and the typology of veteran teachers we developed in studies 3 and 4, we need to include these groups of (former) teachers in future research to generalize our findings.

In our first two studies, described in chapters 2 and 3, we combined interview data with questionnaires: that is, the QTI (Wubbels et al., 2006), the Teacher Sense of Efficacy Scale (TSES) (Tschannen Moran & Woolfolk Hoy, 2001), and the Teacher Classroom Efficacy Scale (TCES), Friedman, 2002. This combination turned out to be fruitful. In the interviews, the veteran teachers provided more detailed information on the different aspects of their job satisfaction, their relationships with students, and their interpersonal self-efficacy, which was not captured using the questionnaires. For example, teachers who did not realize their aspirations in the teacher–student relationships, mentioned elements from their individual biographies as causes for being less successful in creating positive relationships with their students: such as their children having grown up and left home, making it more difficult for them to understand what is going on in students' minds. Moreover, we found some discrepancies between the interviews with veteran teachers and the findings from the general questionnaire on teachers' self-efficacy of Tschannen-Moran & Woolfolk Hoy (2001). In the interviews, the teachers provided more detailed information, partly contrary to the findings gathered using the questionnaire about their self-efficacy: although teachers had a relatively high score on the TSES (sub-scale classroom management), they indicated that they didn't feel able to realize their aspirations in their relationships with students.

3. CONCLUSIONS

3.1 Limitations and future research

First, we discuss limitations of this study and then propose directions for further research.

In the first two studies, we combined data derived from questionnaires with data from interviews, using a limited number of respondents. This combination provided insight into the mechanisms underlying the relationship between veteran teachers' relationships with their students and their job satisfaction. However, a limitation was the small number of respondents. In the fourth study, we developed a typology of veteran teachers based on data from questionnaires, which were completed by 132 respondents. This means that our studies are limited by either the number of participants or the lack of richness of data collection methods.

In future research it is necessary to find out more about the mechanisms underlying the relationship between veteran teachers' relationships with their students and their job satisfaction. These further insights are needed to know how to support veteran teachers in maintaining their job satisfaction. Further research could be focused on validating our typology of veteran teachers using other samples and other data sources. A possible way of doing that is to interview veteran teachers, their students and colleagues, and members of school boards. Questions in the interviews with veteran teachers could be focused on the degree to which they recognize the perceptions of their students, and their explanations for the degree of accuracy (the degree to which their perceptions are in line with the perceptions of their students) and the degree to which they have realized their aspirations in the relationships with their students, and how all these are related to their job satisfaction.

3.2 Implications for practice

We discuss two implications for practice: 1) the possibility of using the Questionnaire on Teacher Interaction-Self-Efficacy (QTI-SE) to diagnose veteran teachers' interpersonal self-efficacy, and 2) the use of the typology of veteran teachers in order to determine what kind of coaching would be appropriate. Given that veteran teachers' job satisfaction is positively related to the quality of their relationships with students, and the relationship between (veteran) teachers' self-efficacy and their job satisfaction, it could be important to diagnose veteran teachers' interpersonal self-efficacy. The developed instrument, the Questionnaire on Teacher Interaction-Self-Efficacy (QTI-SE), can be used to enable veteran teachers to reflect on their own interpersonal self-efficacy.

When veteran teachers rate their interpersonal self-efficacy quite low, it may be important for them to ask for support or for the school board to intervene to prevent further diminishing job satisfaction and possible attrition. Coaching could be a solution, using the results of the QTI-SE and addressing issues such as the difficulties veteran

teachers perceive, the behaviors they feel unable to exhibit, and the possibilities of learning (again) to behave in accordance with students' needs.

The developed typology of veteran teachers can help coaches and school boards in the identification and subsequent guiding of veteran teachers in need of help. For instance, it could be important to know to what degree veteran teachers feel they realize their aspirations in their relationships with students and what strategies they deem necessary to reach their own aspirations in these relationships. Another possible question is the degree of their accuracy, i.e., the degree to which their self-perceptions of their relationships with students are in line with students' perceptions of those relationships.

For the unsatisfied teachers and the *negative under-estimators* from our typology in particular, support from the school board through coaching and training could be beneficial. Coaching of the *negative under-estimators* could be focused on adjusting their interpersonal aspirations to a more realistic level, and adjusting their self-perceptions closer to the levels of the interpersonal perceptions of their students. Besides, training in interpersonal skills can help them to increase their interpersonal self-efficacy. The situation of the *negative realists* seems to be more severe; they have low interpersonal aspirations, they almost realize these aspirations, and their self-perceptions are as negative as the perceptions of their students. Coaching in their case could be focused on the intrinsic rewards of teaching (Scott et al. 2001): 'Why do you want to be a teacher, what is your motivation for this occupation, even at the end of your career?' More specifically, coaching could focus on adjusting their interpersonal aspirations in a positive way. If this coaching is successful, developing teaching behaviors in accordance with students' needs could help these teachers to increase their interpersonal self-efficacy.

The satisfied teachers could also benefit from coaching and training, to prevent them from becoming dissatisfied. The *positive over-estimators* run the risk of becoming dissatisfied if they no longer manage to activate their 'wishful thinking' mechanism. Coaching focused on adjusting their interpersonal aspirations to a more realistic level could help them remain satisfied. Finally, the *positive under-estimators* could be supported by coaching focused on increasing their self-esteem by adjusting their interpersonal self-perceptions to their students' perceptions. Training could support them in increasing their interpersonal self-efficacy.

4. CONCLUDING REMARKS

This dissertation gained more insights into the association between veteran teachers' relationship with students and their job satisfaction.

Veteran teachers differ in the degree in which they are satisfied and in the degree they realize their aspirations in their relationships with students. Dissatisfied veteran teachers in first place seem to refer to the extrinsic factors as workload and the massive paperwork burden, whereas satisfied veteran teachers seem to be more inclined to refer

to intrinsic factors such as positive relationships with students. Also, veteran teachers differ in the degree in which they perceive their relationship with students more positive or negative than their students, and in their interpersonal self-efficacy. It could be worthwhile to include the role of veteran teachers' relationships for their job satisfaction, in the coaching of these teachers. The instruments used and developed in this dissertation, the Questionnaire on Teacher Interaction (QTI) and the Questionnaire on Teacher Interaction: Self-Efficacy (QTI-SE), may be helpful to get more specific information about the individual veteran teacher, which can be useful for developing a tailor-made coaching.

Coaching may not be focused only on the dissatisfied teachers; prevention of job dissatisfaction may be promoted by coaching also satisfied veteran teachers. Because of the fact that these teachers either over- or under-estimate their selves in their relationship with students, it may be important to signalize this, and to work at diminishing their under- or overestimation.

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S U M M A R Y

Not all teachers are able stay satisfied with their job towards the end of their career. It can be a personal drama for teachers to end their career with negative feelings about their job. If veteran teachers are not satisfied with their job, they may want to leave the profession before their retirement age. This phenomenon is problematic, as it could add to the impending teacher shortages in many Western countries (OECD, 2012).

To prevent veteran teachers from leaving the profession early, it is important to have insight into factors that influence their job satisfaction. Common sources for teachers' lack of job satisfaction are work overload, low job status, demands of school administrators (Day, 2006), and poor relationships with students and disruptive student behavior (Spilt, Koomen, & Thijs, 2011). The aim of this dissertation was to gain a better understanding of the association between veteran teachers' job satisfaction and the quality of their relationships with students.

CHAPTER 1

In the first chapter we defined the concept 'job satisfaction' (Locke, 1976) and we distinguished the intrinsic and extrinsic causes of veteran teachers' job satisfaction mentioned in the literature (cf. Dinham & Scott, 1998). We described the concept 'relationships between teacher and students' using the 'the interpersonal circle for the teacher' (cf. Wubbels, Brekelmans, Den Brok, & Van Tartwijk, 2006) and the Questionnaire on Teacher Interaction (QTI), which maps perceptions of teachers' interpersonal behavior, and teacher agency and communion in particular. We then discussed our research questions. The overarching question this dissertation addresses is: 'How is veteran teachers' job satisfaction associated with the different aspects of their relationships with students?' This overarching research question was worked out in four research questions, for which we conducted four separate empirical studies. Each study focused on different aspects of veteran teachers' job satisfaction and teacher-student relationships.

1. How is the teacher-student relationship related to job satisfaction during the careers of four teachers who managed to maintain high job satisfaction until the end of their careers?

2. How do veteran teachers' aspirations, their realized aspirations, and their self-efficacy with respect to their relationships with their students relate to their job satisfaction?

In study 2, we found a discrepancy between the results from the Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran and Woolfolk Hoy, 2001) and the teachers' interpersonal self-efficacy as reported in the interviews. We therefore conducted a study of the development of an instrument to measure teachers' self-efficacy with respect

to their relationships with students. In that study, the following research question was answered.

3. a. To what extent is teachers' interpersonal self-efficacy related to their realized aspirations in their relationships with their students?

3. b. To what extent is teachers' interpersonal self-efficacy related to their self-efficacy with respect to classroom management, discipline control, and classroom consideration?

3. c. To what extent do younger teachers and veteran teachers report lower interpersonal self-efficacy compared with teachers in mid-career?

In the fourth study we aimed to understand how veteran teachers' interpersonal aspirations, their realized aspirations, and the interpersonal perceptions of their students combine with their job satisfaction. The following research question was answered.

4. What types of veteran teachers can be distinguished based on their realized interpersonal aspirations with students, the accuracy of their self-perceptions of their interpersonal relationships with students, and their satisfaction with the nature of their work?

The research questions were answered in four studies (chapters 2 to 5).

CHAPTER 2

In Chapter 2, we investigated the ways in which job satisfaction and relationships with students changed during the teaching careers of four satisfied veteran teachers. The four teachers were 54 years or older, had been teaching for more than 25 years, and had participated in earlier research on the development of teacher-student interpersonal relationships throughout their careers (Brekelmans et al., 2005). We used data from the Questionnaire on Teacher Interaction (Wubbels et al., 2006), collected at various points in their careers. Besides using student perceptions of these teachers' interpersonal behavior, we interviewed the teachers using the narrative-biographical method (Kelchtermans, 1993).

In the literature, we found various career choices of veteran teachers (Day et al., 2006; Hargreaves, 2005; Huberman, 1993): from avoiding classroom teaching as much as possible to full-time teaching with pleasure. We recognized these choices among the four teachers in our study. They emphasized the importance of good relationships with students throughout their careers. We also found a correspondence between veteran

teachers' job satisfaction and their relationships with students: in periods when they perceived their relationships as less good, they also experienced less job satisfaction.

Based on previous research into students' perceptions of teachers' interpersonal behavior throughout the teachers' careers (Brekelmans et al., 2005), the general expectation would be that teacher agency (or teacher interpersonal influence in the classroom) is rather stable throughout teachers' mid- and late careers, whereas communion (the warmth or affiliation in interpersonal contact) tends to decline somewhat in the late stages of the career. However, the four veteran teachers in our study, who all felt relatively high job satisfaction, had higher scores on agency at the end of their careers than during earlier phases. The scores for communion of the four veteran teachers were also relatively high at the end of their careers compared with during earlier phases. We also found a positive relation between these teachers' job satisfaction and the self-reported quality of the teacher-student relationship at the start of the career; and for three of the four teachers we observed a positive relationship near the end of the career. Note that teachers' positive reports about the teacher-student relationships sometimes differed from student perceptions of that relationship.

CHAPTER 3

In the second study, we examined veteran teachers' aspirations in their relationships with their students (i.e., what kind of relationships do they want to realize?), the extent to which they realized these interpersonal aspirations, and the extent to which they believed they were capable of realizing their aspirations in their teacher-student relationships (i.e., their interpersonal self-efficacy). We used the Job Demands model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) to explore veteran teachers' aspirations (personal demands), their realized aspirations, and their interpersonal self-efficacy (personal resources) with respect to their relationships with students. Twelve veteran secondary teachers participated in this study, all of whom were 54 years or older and had been teaching for more than 25 years. Data were collected using interviews and the QTI (Wubbels et al., 2006), the Job Satisfaction Index (JSI) (van der Ploeg & Scholte, 2003), and the Teachers' Sense of efficacy scale (TSES) (Tschannen-Moran and Woolfolk Hoy, 2001). Four different groups of veteran teachers were distinguished by their degree of job satisfaction and degree of realized aspirations in their teacher-student relationships: two groups who had realized their aspirations in their teacher-student relationships (one group with relatively high job satisfaction and one with relatively low job satisfaction), and two groups who had not realized their aspirations (again, one group with relatively high job satisfaction and one with relatively low job satisfaction).

Three of the four teachers in the group of teachers with high job satisfaction who had not realized their aspirations in their relationships with students, had chosen to minimize their teaching tasks and to engage in other tasks in and outside the school instead. One teacher, who still taught full-time, admitted that he had less energy than

before. He had withdrawn from all other tasks at school besides teaching. In terms of the JD–R model, these four teachers had not found the right balance between the personal demands of creating positive teacher–student relationships and the personal resources of realizing their aspirations and self-efficacy in the teacher–student relationship. Three of the four teachers had adjusted their working conditions; the fourth dealt with this imbalance by focusing on the importance of another job resource: the joy derived from teaching his school subject, an activity in which he felt in control. The other three satisfied veteran teachers were all teaching full time, and they did realize their aspirations in the teacher-student relationships.

The dissatisfied veteran teachers referred to private circumstances (e.g., bad health), educational reforms, and problems with the school board as reasons for their low job satisfaction. When asked explicitly about the quality of their relationships with their students, these teachers reported that they had not managed to create the relationships with students that they would have liked, because they feared that doing so would mean losing control in class. In terms of the JD–R model, they had not found the right balance between the personal demands of creating positive teacher–student relationships and the personal resources of realizing their aspirations and self-efficacy in the teacher–student relationship. Only one dissatisfied veteran teacher did realize his aspirations in the teacher-student relationship; he explained that his low job satisfaction was a result of a severe conflict with the school board.

In this study, we learned that most satisfied veteran teachers felt a balance between the personal demand of creating positive relationships with students and the personal resources of realizing their aspirations in their relationships with students and interpersonal self-efficacy. We found that the results from questionnaires measuring more general teaching self-efficacy were not congruent with the interpersonal self-efficacy reported in the interviews. This finding brought us to study 3.

CHAPTER 4

Having found a discrepancy between the results from the TSES (Tschannen-Moran and Woolfolk Hoy, 2001) and the degree of self-reported interpersonal self-efficacy in the interviews in the second study, we decided to construct a new questionnaire for measuring interpersonal self-efficacy, derived from the IPC-T and the QTI.

The aim of this third study was to develop and evaluate an instrument for measuring teachers' interpersonal self-efficacy. We referred to this instrument as the Questionnaire on Teacher Interaction Self-Efficacy (QTI-SE). The development of the QTI-SE was based on themes and items used in the QTI (Wubbels et al., 1985; Wubbels et al., 2006; Wubbels, Brekelmans, Den Brok, Levy, Mainhard, & Van Tartwijk, 2012). We focused on items that have been found to have a positive correlation with cognitive or affective student outcomes (den Brok, Brekelmans, & Wubbels, 2004, 2006, Brekelmans, 2010). Two hundred and twenty-three teachers in secondary education participated in this study,

varying in age from under 28 to over 54 years. Factor analyses identified two underlying dimensions in the QTI-SE which correspond to 'IPC-teacher', on which the QTI is based: agency and communion. (cf. Wubbels et al., 2006; Wubbels et al., 2012). Eight items were included in the QTI-SE, four in the agency scale and four in the communion scale. To check the predictive, concurrent, and differential validity of this instrument, associations with data on a number of other variables were inspected: the degree in which teachers realized their aspirations in the teacher-student relationships, their age, and their scores on the TSES, subscale 'Classroom management' (Tschannen-Moran & Woolfolk Hoy, 2001), and the scales 'Classroom control' and 'Classroom consideration' of the Teacher Classroom Efficacy Scale (TCES) of Friedman (2002). Concerning teachers' ages: from research we know that self-efficacy is generally low at the beginning and the end of the teaching career, and higher in between (Klassen & Chui, 2010).

First, a moderate positive correlation was found between the agency and communion scores of the QTI-SE, on the one hand, and teachers' realized aspirations in their relationships with their students (as indicated by the difference scores between the self-perceptions and ideal perceptions of the teacher-student relationships on both dimensions), on the other hand. Second, moderate positive correlations were also found between the QTI-SE scores and the subscale Classroom management of the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) and the subscales Classroom control and Classroom consideration of the teacher classroom efficacy scale (TCES; Friedman, 2002). These correlations supported the concurrent validity of the QTI-SE. Finally, we did not find any significant relations between the scores on the QTI-SE dimensions agency and communion and teachers' age. We expected rather low self-efficacy at the start of the career, increasing self-efficacy at mid-career, and diminishing self-efficacy at the end of the career (Klassen & Chui, 2010). Our findings imply that we were not able to establish the differential validity of the QTI-SE through differences in teachers' career stages.

We concluded that the newly developed measure for interpersonal self-efficacy appeared to be reliable and showed satisfactory construct and concurrent validity.

CHAPTER 5

In study four, we aimed to understand how veteran teachers' interpersonal aspirations, their realized aspirations, and the interpersonal perceptions of their students combine with their job satisfaction. Such a typology of veteran teachers might help in adapting coaching to different types of teachers to keep them satisfied in the teaching profession.

In this study, 132 secondary school teachers were included, all 54 years or older. We collected data using the QTI (Wubbels et al., 2006), the ASI (van der Ploeg en Scholte, 2001), and the QTI-SE (Veldman et al., 2017). First, we performed cluster analysis with veteran teachers' realized interpersonal aspirations, the accuracy of their self-perceptions of the teacher-student relationship, and their satisfaction with the nature of their

work as input variables. Second, we used descriptive statistics, χ^2 -tests, and univariate analyses of variance, using the remaining variables (veteran teachers' interpersonal aspirations and self-perceptions, interpersonal self-efficacy, and the extent of their teaching tasks) to further describe the typology that resulted from the first stage.

Four types of veteran teachers were distinguished; these were labeled and described as follows: the positive over-estimators, the positive under-estimators, the negative under-estimators, and the negative realists. In general, positive over-estimators had rather high job satisfaction and perceived the relationship with their students more positively than their students did. This group of veteran teachers had high interpersonal aspirations, especially on the communion aspect, which, according to their students, they didn't realize. Positive under-estimators had rather high job satisfaction and generally had more negative perceptions of the relationship with their students than their students had. They had moderate interpersonal aspirations and self-perceptions, of both agency and communion, and they generally realized their interpersonal aspirations only to a limited extent. In general, negative under-estimators had rather low job satisfaction and very low self-perceptions of the relationship with their students. Students perceived the quality of the relationship more positively, resulting in teachers' under-estimation. These teachers also showed high aspirations in the relationship with their students, which – in combination with their low self-perceptions- they generally did not realize. They did not feel able to realize a good relationship with students. Moreover, these teachers experienced low satisfaction in all aspects of their teaching job. Negative realists had rather low job satisfaction and generally had accurate perceptions of their low-quality relationships with their students. This group of teachers had low aspirations in the teacher-student relationship, and they behaved in accordance with these low aspirations. Nevertheless, they did not feel able to realize good relationships with their students, especially with respect to agency.

In this study, we developed a typology of veteran teachers, using various aspects of the veteran teachers' relationships with students (aspirations, realized aspirations, accuracy, and interpersonal self-efficacy) and various aspects of job satisfaction. This typology can be helpful for identifying the different aspects of veteran teachers' relationships with students in relation to their job satisfaction, in order to adjust coaching to the specific needs of the veteran teacher.

CHAPTER 6

In the concluding chapter, we first presented the main findings of the four separate studies of this dissertation, followed by reflections, implications, and directions for future research. Finally, implications for practice were presented.

We reflected on the literature and on theories of teacher job satisfaction (Dinham and Scott, 1998; Scott, Stone, & Dinham, 2001; Grayson and Alvarez, 2008), teacher-student relationships (Brekelmans, Wubbels, and Van Tartwijk, 2005; Wubbels, Créton, and

Hooymayers 1992; Wubbels, Brekelmans, den Brok, Levy, Mainhard, and van Tartwijk, 2012), teacher self-efficacy (Dellinger, Bobbett, Olivier, and Ellett, 2008; Klassen et al., 2011, Tschannen Moran & Woolfolk Hoy, 1998, 2001, 2007), the interrelations between teacher job satisfaction and teacher-student relationships (Betoret, 2011, 2006; Chang, 2009; Klassen & Chui, 2010; Kyriacou, 2001; Spilt, Koomen, and Thijs), and finally, the relationship between teacher job satisfaction and teacher self-efficacy (Klassen & Chui, 2010). All the literature mentioned above focused on teachers in general. This dissertation, however, focused on veteran teachers, and we aimed to provide additional insight into this particular target group. We defined the concept of interpersonal self-efficacy and developed and validated a new scale for measuring teachers' interpersonal self-efficacy based on the Questionnaire on Teacher Interaction (QTI) (Wubbels et al., 2006): the Questionnaire on Teacher Interaction- Self-Efficacy (QTI-SE).

Furthermore, we discussed our samples and data collection, which included a combination of questionnaires and interviews. Combining interview data and data from questionnaires turned out to be fruitful. In the interviews, the veteran teachers provided more detailed information on the different aspects of their job satisfaction, their relationships with students, and their interpersonal self-efficacy, which was not captured by the questionnaires. We then discussed limitations and suggested directions for further research.

In the first two studies, we combined data derived from questionnaires with data from interviews, using a limited number of respondents. This combination provided insight into the mechanisms underlying the relationship between veteran teachers' relationships with their students and their job satisfaction. A limitation was the small number of respondents. In the fourth study, we developed a typology of veteran teachers based on data from questionnaires which were completed by 132 respondents. This means that either the number of participants or the lack of richness of data collection methods limits our studies.

Further research could be focused on validating our typology of veteran teachers using other samples and other data sources. In addition, future research could be focused on interviewing veteran teachers, their students and colleagues, and members of school boards. Questions in the interviews with veteran teachers could be focused on the degree to which they recognize the perceptions of their students, and their explanations for their degree of accuracy (the degree to which their perceptions are in line with the perceptions of their students) and the degree to which they have realized their aspirations in their relationships with their students, and how all these are related to their job satisfaction.

Finally, we discussed two implications for educational practice. First, the Questionnaire on Teacher Interaction-Self-Efficacy (QTI-SE) can be used to diagnose veteran teachers' interpersonal self-efficacy. Second, the typology of veteran teachers can be used to determine what kind of coaching would be appropriate for the specific types of veteran teachers. Both the diagnosis of self-efficacy and the coaching of different teacher types

are aimed at keeping veteran teachers as long as possible in the profession, enjoying positive relationships with their students.

SAMENVATTING

Niet alle leraren slagen erin om tot aan het einde van hun carrière tevreden te blijven met hun werk. Voor de leraren zelf kan het een grote teleurstelling zijn om met een negatief gevoel met werken te stoppen. Wanneer oudere leraren niet tevreden zijn met hun werk, bestaat de kans dat zij hiermee stoppen voordat zij de pensioenleeftijd hebben bereikt. Dat is, gezien de lerarentekorten in veel Westerse landen (OECD, 2012) ongewenst. Vaak genoemde oorzaken voor de afnemende arbeidstevredenheid bij oudere leraren zijn overbelasting, lage status van het beroep (Day, 2006), verstorend gedrag van leerlingen, en slechte relaties met leerlingen (Spilt, Koomen & Thijs, 2011). Het doel van dit proefschrift was meer inzicht te krijgen in het verband tussen de arbeidstevredenheid van oudere leraren en de kwaliteit van hun relatie met leerlingen.

HOOFDSTUK 1

In het eerste hoofdstuk hebben wij het begrip ‘arbeidstevredenheid’ gedefinieerd (Locke, 1976) en een onderscheid gemaakt in intrinsieke en extrinsieke oorzaken van arbeidstevredenheid, die in literatuur voor met name oudere leraren worden genoemd (cf. Dinham & Scott, 1998). Daarna hebben wij het begrip ‘relaties tussen leerling en leraar’ omschreven aan de hand van “the interpersonal circle for the teacher” (Wubbels, Brekelmans, Den Brok, & Van Tartwijk, 2006) en de Vragenlijst Interpersoonlijk Leeraarsgedrag (VIL). Deze vragenlijst, afgeleid van “the interpersonal circle for the teacher” brengt de percepties in kaart van het interpersoonlijk gedrag van de leraar, met name wat betreft de invloed en de nabijheid van de leraar in de relatie met leerlingen.

Vervolgens hebben wij het doel en de onderzoeksvragen van dit proefschrift gepresenteerd. Het doel van dit proefschrift is inzicht te verschaffen in het verband tussen de arbeidstevredenheid van de oudere leraar en de relatie tussen de oudere leraar en zijn of haar leerlingen. De overkoepelende onderzoeksvraag van dit proefschrift luidt: ‘Hoe hangt de arbeidstevredenheid van oudere leraren samen met de verschillende aspecten van hun relatie met leerlingen?’ De overkoepelende vraag is uitgewerkt in vier onderzoeksvragen, die wij via vier aparte empirische studies hebben getracht te beantwoorden. Elke studie was gericht op andere aspecten van de arbeidstevredenheid en de relatie met leerlingen van de oudere leraar. De eerste twee onderzoeksvragen zijn:

1. Wat is het verband tussen de relatie van de oudere leraar met zijn of haar leerlingen en de arbeidstevredenheid bij vier leraren die aan het eind van hun loopbaan een hoge arbeidstevredenheid hebben?
2. Wat is het verband bij oudere leraren tussen hun ambities met betrekking tot hun relatie met leerlingen, de mate waarin zij die ambities realiseren, hun interpersoonlijke self-efficacy en hun arbeidstevredenheid?

Bij het uitvoeren van studie 2 vonden wij een discrepantie tussen de resultaten van de bestaande Teacher Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001) en de in interviews gerapporteerde interpersoonlijke self-efficacy. Deze bevinding heeft geleid tot onderzoeksvraag 3, met de volgende deelvragen:

3. a. In welke mate is interpersoonlijke self-efficacy van leraren gerelateerd aan de mate waarin leraren hun ambities met betrekking tot hun relatie met leerlingen realiseren?

3. b. In welke mate is interpersoonlijke self-efficacy gerelateerd aan self-efficacy op het gebied van “classroom management”, “classroom discipline control”, en “classroom consideration”?

3. c. In welke mate rapporteren jongere en oudere leraren een lagere interpersoonlijke self-efficacy dan leraren in het midden van hun loopbaan?

De vierde studie had tot doel na te gaan hoe bij oudere leraren de mate waarin zij hun ambities met betrekking tot de relatie met leerlingen realiseren en de percepties van leerlingen van die relatie samenhangen met de arbeidstevredenheid. De volgende onderzoeksvraag werd beantwoord.

4. Welk typen oudere leraren kunnen worden onderscheiden op basis van de mate waarin oudere leraren hun ambities in de relatie met leerlingen realiseren, de mate waarin hun zelfperceptie van de relatie met leerlingen overeenkomt met de perceptie van de leerlingen, en hun tevredenheid met de aard van hun werk?

De onderzoeksvragen werden achtereenvolgens in vier studies beantwoord (hoofdstukken 2 t/m 5).

HOOFDSTUK 2

In hoofdstuk 2 onderzochten we hoe bij vier tevreden, oudere leraren hun arbeidstevredenheid en hun relatie met leerlingen zijn veranderd in de loop van hun carrière. De vier leraren waren allen ouder dan 54 jaar, gaven meer dan 25 jaar les, en hadden eerder deelgenomen aan onderzoek naar de ontwikkeling van interpersoonlijke relaties tussen leraar en leerlingen. (Brekelmans et al., 2005). Op verschillende momenten tijdens hun loopbaan hadden zij hun leerlingen de Vragenlijst Interpersoonlijk Leraarsgedrag (VIL) (Wubbels et al., 2006) laten invullen. Deze data over de percepties van leerlingen van het interpersoonlijk gedrag van de leraar hebben wij in verband gebracht met data verkregen uit interviews met oudere leraren volgens de narratieve-biografische methode (Kelchtermans, 1993).

Oudere leraren maken verschillende keuzen in hun loopbaan (Day et al., 2006; Hargreaves, 2005; Huberman, 1993): van het zoveel mogelijk vermijden van lesgeven tot het met veel plezier fulltime lesgeven. We herkenden deze keuzen bij onze vier leraren. In de interviews benadrukten ze allemaal het belang van een goede relatie met leerlingen tijdens hun loopbaan: in perioden waarin zij de relatie als minder goed percipieerden, waren zij ook minder tevreden met hun werk. Op basis van eerder onderzoek (Brekelmans et al., 2005), verwachtten wij dat de interpersoonlijke invloed ("agency") in de klas vrij stabiel zou zijn in het midden- en aan het einde van de loopbaan, terwijl de nabijheid in het contact met leerlingen ("communion") in de laatste stadia van de loopbaan zou afnemen. Echter, de vier oudere tevreden leraren in onze studie scoorden hoger op invloed ("agency") en nabijheid ("communion") aan het einde van hun loopbaan dan tijdens eerdere fasen in hun loopbaan. We vonden een positieve relatie tussen de arbeidstevredenheid van de vier leraren met de door hen in de interviews gerapporteerde kwaliteit van de relatie met leerlingen aan het begin van hun loopbaan; voor drie van de vier leraren vonden we deze relatie ook tegen het einde van de loopbaan. Echter, de positieve rapportages van de relatie met leerlingen van de leraren verschilden soms van de (negatievere) leerlingpercepties.

HOOFDSTUK 3

In de tweede studie hebben we gekeken naar de ambities die oudere leraren hebben met betrekking tot hun relatie met hun leerlingen (wat voor relatie wilden zij realiseren?), de mate waarin zij zelf dachten die ambities te realiseren, en de mate waarin ze vertrouwen hadden dat zij die ambities konden realiseren (het vertrouwen in eigen interpersoonlijk kunnen: "interpersonal self-efficacy"). We gebruikten het Job Demands-model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) om te onderzoeken hoe de ambities van oudere leraren ("personal demands"), hun gerealiseerde ambities en hun interpersoonlijke self-efficacy ("personal resources") samenhangen met hun arbeidstevredenheid.

In deze studie participeerden 12 oudere docenten, allen waren ouder dan 54 jaar, en gaven langer dan 25 jaar les. Data werden verzameld door middel van interviews en met behulp van de vragenlijsten VIL (Wubbels et al., 2006), de Arbeidssatisfactieindex (ASI) (Van der Ploeg & Scholte, 2003), en de Teachers' Sense of Efficacy Scale (TSES) (Tschannen Moran & Woolfolk Hoy, 2001). We maakten onderscheid tussen vier verschillende groepen oudere leraren op basis van hun arbeidstevredenheid en de mate waarin de ambities met betrekking tot de relatie met leerlingen waren gerealiseerd: twee groepen oudere leraren die hun ambities hadden gerealiseerd (waarvan een groep met een relatieve hoge en een met een relatieve lage arbeidstevredenheid), en twee groepen oudere leraren die hun ambities in de relatie met leerlingen niet hadden gerealiseerd (weer een groep met een relatieve hoge en een met een relatieve lage arbeidstevredenheid).

Drie van de vier tevreden leraren die hun ambities niet realiseerden, hadden ervoor gekozen hun lestaken naar een minimum terug te brengen en andere taken binnen of buiten de school op zich te nemen. Een leraar die nog fulltime les gaf, gaf toe dat hij minder energie had dan vroeger en dat hij zich uit alle andere activiteiten op school, naast het lesgeven, had teruggetrokken. In termen van het JD–R model, hebben deze vier leraren de juiste balans niet gevonden tussen de ‘personal demands’ en ‘resources’ op interpersoonlijk gebied. Drie van de vier pasten hun werkomstandigheden daarop aan; de vierde richtte zich op het plezier dat hij beleefde aan het schoolvak, een andere ‘job resource’. De andere vier tevreden oudere leraren realiseerden hun ambities op interpersoonlijk gebied en gaven allen fulltime les.

De oudere ontevreden leraren noemden in eerste instantie privé-omstandigheden, onderwijsvernieuwingen en problemen met de schoolleiding, als reden voor hun ontevredenheid. Bij het in de interviews expliciet vragen naar de kwaliteit van de relaties die zij met hun leerlingen hadden, vertelden zij dat ze zich niet in staat voelden de relatie met leerlingen vorm te geven op de manier die ze eigenlijk wilden. Ze waren met name bang dan de controle in de klas te verliezen. In termen van het JD–R model, hadden zij niet de goede balans gevonden tussen de “personal demands” en “resources” op interpersoonlijk gebied. Slechts één ontevreden oudere leraar realiseerde zijn ambities op interpersoonlijk gebied wel; hij had grote conflicten met de schoolleiding en zag die als reden voor zijn lage arbeidstevredenheid.

In deze studie vonden wij een balans bij de meeste tevreden oudere leraren tussen de “personal demands” om een positieve relatie met leerlingen te creëren en de “personal demands” om die relatie te realiseren, en het gevoel te hebben dat ook te kunnen (“interpersonal self-efficacy”). Daarnaast vonden wij een discrepantie tussen de resultaten die we verkregen met de TSES (Tschannen Moran & Woolfolk Hoy, 2001) en de antwoorden op de vragen in onze interviews over interpersoonlijke self-efficacy. Dit gegeven bracht ons tot de derde studie.

HOOFDSTUK 4

Voortbouwend op de discrepantie die wij vonden in studie 2 tussen de resultaten van de Teachers’ Sense of Efficacy Scale (TSES) (Tschannen Moran & Woolfolk Hoy, 2001) en de antwoorden op de vragen over interpersoonlijke self-efficacy in de interviews, besloten we een nieuwe vragenlijst te ontwerpen om interpersoonlijke self-efficacy (d.w.z. het vertrouwen dat je een gewenste relatie ook kunt realiseren) te meten. Het doel van de studie was een vragenlijst te ontwikkelen en te evalueren. Wij noemden de vragenlijst de Vragenlijst Interpersoonlijk Leraarsgedrag Self-Efficacy (VIL-SE, e.g. in English: QTI-SE).

In deze studie participeerden 223 leraren uit het voortgezet onderwijs, variërend in leeftijd van onder de 28 tot boven de 54. De ontwikkeling van de VIL-SE was gebaseerd op thema’s en items uit de VIL (Wubbels et al., 1985; Wubbels et al., 2006; Wubbels, Brekelmans, Den Brok, Levy, Mainhard, & Van Tartwijk, 2012). We gebruikten alleen items

waarvan we uit eerder onderzoek (Wubbels et al. 2006) wisten dat ze een positieve relatie hebben met cognitieve en affectieve uitkomsten bij leerlingen. Factoranalyse liet twee onderliggende dimensies zien, zoals we die kennen van de ‘Interpersonal Circle for the Teacher’ (cf. Wubbels, et al., 2006; Wubbels et al. 2012): invloed (“agency”) en nabijheid (“communion”). Acht items zijn in de VIL-SE opgenomen, vier op de invloed-schaal, en vier op de nabijheid-schaal.

Om de ‘predictive’, ‘concurrent’, en ‘differential’ validiteit vast te stellen van onze vragenlijst werden verbanden onderzocht met een aantal variabelen: de mate waarin leraren hun ambities in hun relatie met leerlingen realiseerden, hun scores op de bestaande self-efficacy-vragenlijsten, de subschaal ‘Classroom management’ van de TSES (Tschanen-Moran & Woolfolk Hoy, 2001) en de subschalen ‘Classroom control’ en ‘Classroom consideration’ van de Teacher Classroom Efficacy Scale (TCES; Friedman, 2002), en leeftijd. Wat betreft de laatste variabele: uit onderzoek is gebleken dat de self-efficacy van leraren laag is bij de start in het beroep, toeneemt in de het midden van de loopbaan, en aan het einde van de loopbaan weer afneemt (Klassen & Chui, 2010).

Allereerst vonden we een positieve correlatie tussen de invloed- en nabijheidsscores van de VIL-SE en de mate waarin leraren hun ambities in de relatie met leerlingen realiseerden (berekend met de verschillscore op de VIL, tussen het zelfbeeld en het ideaalbeeld van de leraren op beide dimensies). Daarnaast werden er positieve correlaties gevonden tussen de scores op de VIL-SE en de subschaal ‘Classroom management’ van de TSES (Tschanen-Moran & Woolfolk Hoy, 2001) en de subschalen ‘Classroom control’ en ‘Classroom consideration’ van de Teacher Classroom Efficacy Scale (TCES; Friedman, 2002). Deze correlaties bevestigden de ‘concurrent’ validiteit van de VIL-SE. We vonden echter geen significante relaties tussen de scores op de dimensies invloed en nabijheid op de VIL-SE met de factor leeftijd. Dat betekent dat we de “differential” validiteit niet hebben vastgesteld.

De in deze studie ontwikkelde en geëvalueerde vragenlijst blijkt een betrouwbaar instrument te zijn voor het meten van interpersoonlijke self-efficacy, die voldoende scoort op “predictive” en “concurrent” validiteit.

HOOFDSTUK 5

In studie 4 hebben wij ons gericht op het ontwikkelen van een typologie van oudere leraren op basis van hun interpersoonlijk ambities, hun gerealiseerde ambities, de perceptie van de interpersoonlijk relatie door leerlingen en de arbeidstevredenheid. Zo’n typologie van oudere leraren kan nuttig zijn om de begeleiding van oudere leraren meer op maat te ontwikkelen, met het doel hen langer tevreden voor het beroep te behouden.

In deze studie werden data van 132 leraren uit het voortgezet onderwijs meegenomen, allen ouder dan 54 jaar. We verzamelden data met behulp van de Vragenlijst Interpersoonlijk Leraarsgedrag (VIL; Wubbels et al., 2006), de Arbeidssatisfactie Index

(ASI; Van der Ploeg & Scholte, 2001), en de Vragenlijst Interpersoonlijk Leraarsgedrag-Self-Efficacy (VIL-SE; Veldman, Admiraal, Mainhard & Van Tartwijk, 2017).

Allereerst hebben wij een clusteranalyse uitgevoerd met als inputvariabelen de gerealiseerde interpersoonlijke ambities (het verschil tussen ideaalbeeld en zelfbeeld), de accuraatheid van de interpersoonlijke zelfbeelden van de relatie (het verschil tussen zelfbeeld en leerlingbeeld), en de arbeidstevredenheid (subschaal 'aard van het werk', die met name gericht is op de intrinsieke oorzaken voor arbeidstevredenheid). Om de met clusteranalyse verkregen typologie nader te beschrijven gebruikten wij beschrijvende statistiek, χ^2 -toetsen, variantie-analyses voor de overgebleven variabelen (interpersoonlijke ambities, zelfpercepties, interpersoonlijke self-efficacy, en de andere (extrinsieke) variabelen rond arbeidstevredenheid, en de omvang van de lestaak).

In deze studie werden vier typen oudere leraren onderscheiden: 1) de tevreden leraren die zichzelf overschatten, 2) tevreden leraren die zichzelf onderschatten, 3) ontevreden leraren die zichzelf onderschatten en 4) ontevreden realisten. De tevreden leraren die zich overschatten, percipiëren hun relatie met leerlingen positiever dan hun leerlingen. Zij hebben hoge ambities; zij willen een goede relatie met leerlingen realiseren, en willen daarbij vooral dichtbij leerlingen staan. Dat realiseren ze niet, volgens hun leerlingen. Tevreden leraren die zichzelf onderschatten, percipiëren hun relatie met leerlingen in het algemeen negatiever dan hun leerlingen. Zij hebben gemiddelde ambities om een goede relatie met leerlingen te realiseren, zowel op de nabijheid, als de invloed dimensie. Zij realiseren die ambities slechts in beperkte mate. Ontevreden leraren die zichzelf onderschatten, hebben een laag zelfbeeld van de relatie met leerlingen, terwijl leerlingen een veel positiever beeld van de relatie hebben. Deze leraren hebben bovendien heel hoge ambities om een goede relatie met leerlingen te realiseren die ze -in combinatie met hun laag zelfbeeld- niet realiseren. Zij voelen zich niet in staat een goede relatie met leerlingen te realiseren. Zij scoren, net als de ontevreden realisten laag op alle aspecten (intrinsiek en extrinsiek) van arbeidstevredenheid. De ontevreden realisten hebben in het algemeen een goed beeld van hun relatie met leerlingen; dit is echter wel een negatief beeld. Zij hebben geen hoge ambities met betrekking tot de relatie met leerlingen en deze (relatief lage) ambities realiseren ze wel. Niettemin voelen zij zich niet in staat goede relaties met leerlingen te realiseren, met name niet op de invloeddimensie.

In deze studie ontwikkelden we een typologie van oudere leraren, uitgaande van verschillende aspecten van de relatie met leerlingen van de oudere leraar (ambities, gerealiseerde ambities, accuraatheid van de zelfperceptie, en interpersoonlijke self-efficacy) en verschillende aspecten van arbeidstevredenheid (intrinsiek en extrinsiek). Deze typologie kan helpen bij het identificeren van de verschillende typen oudere leraren, die verschillende behoeften hebben op het gebied van coaching, gericht op het behoud van hun arbeidstevredenheid.

HOOFDSTUK 6

In het laatste hoofdstuk presenteerden wij de belangrijkste opbrengsten van de vier afzonderlijke studies van dit proefschrift, met daarna enige reflecties, en implicaties en richtingen voor toekomstig onderzoek. Tot slot werden enkele implicaties voor de onderwijspraktijk gepresenteerd

We reflecteerden op literatuur en theorieën over arbeidstevredenheid van leraren (Dinham and Scott, 1998; Scott, Stone, & Dinham, 2001; Grayson & Alvarez, 2008), leraar-leerling-relaties (Brekelmans, Wubbels, & Van Tartwijk, 2005; Wubbels, Créton, & Hooymayers 1992; Wubbels, Brekelmans, Den Brok, Levy, Mainhard, & Van Tartwijk, 2012), self-efficacy van leraren (Dellinger, Bobbett, Olivier, & Ellett, 2008; Klassen et al., 2011, Tschannen Moran & Woolfolk Hoy, 1998, 2001, 2007), de samenhang tussen arbeidstevredenheid van leraren en leraar-leerlingrelaties (Betoret, 2011, 2006; Chang, 2009; Klassen & Chui, 2010; Kyriacou, 2001; Spilt, Koomen, & Thijs, 2011), en ten slotte, de relatie tussen arbeidstevredenheid en self-efficacy van leraren (Klassen & Chui, 2010). De hierboven genoemde literatuur is gericht op leraren in het algemeen. Echter, in dit proefschrift hebben wij ons gericht op oudere leraren in het bijzonder. Wij gebruikten de literatuur en de theorieën en voegden hier aan toe door onze focus op oudere leraren. We definieerden het concept interpersoonlijke self-efficacy en ontwikkelden en valideerden een nieuw instrument om interpersoonlijke self-efficacy van leraren te meten, gebaseerd op de Vragenlijst Interpersoonlijk Leraarsgedrag (VIL) (Wubbels et al., 2006): de Vragenlijst Interpersoonlijk Leraarsgedrag- Self Efficacy (VIL-SE) (Veldman et al., 2017).

We bespraken de samenstelling van onze respondentengroepen in de verschillende studies en de verschillende dataverzamelingen. Het combineren van interviews met data verkregen uit vragenlijsten bleek vruchtbaar te zijn. In de interviews, gaven de oudere leraren meer gedetailleerde informatie over de verschillende aspecten van hun arbeidstevredenheid, hun relatie met leerlingen, en hun interpersoonlijke self-efficacy, die we niet uit de vragenlijstdata konden halen.

Vervolgens bespraken we de beperkingen van onze studies en hebben we voorstellen voor toekomstig onderzoek gepresenteerd. Tot slot bespraken we twee implicaties voor de onderwijspraktijk. Ten eerste de mogelijkheid voor het gebruik van de Vragenlijst Interpersoonlijk Leraarsgedrag- Self-Efficacy (VIL-SE) voor het diagnosticeren van de interpersoonlijke self-efficacy van oudere leraren, en ten tweede het gebruik van de typologie van oudere leraren om de coaching van de oudere leraar beter af te stemmen op zijn/haar specifieke behoeften. Dit natuurlijk met het doel de oudere leraar zo lang mogelijk op een positieve manier, met een positieve relatie met zijn of haar leerlingen voor het beroep van leraar te behouden.

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Het is niet gemakkelijk om een proefschrift te schrijven in combinatie met een baan als decaan van de Faculteit Onderwijs en Opvoeding van de Hogeschool van Amsterdam. Het is dan ook een lang traject geweest, dat gestart is in de periode dat een aantal oud-collega's van mij, nog werkzaam in het voortgezet onderwijs, in de laatste fase van hun loopbaan kwamen. Ik werkte aan het ICLON, Universiteit Leiden en met Theo Wubbels en Jan van Tartwijk maakten we het plan voor de eerste studie van dit proefschrift. Dank Theo en Jan voor jullie steun bij de start van het project.

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Dit proefschrift zou niet mogelijk geweest zijn zonder de medewerking van de oudere leraren zelf: allereerst de twaalf docenten die ik verschillende keren heb mogen interviewen, en die daarnaast de vragenlijsten invulden, en hun leerlingen ook vragenlijsten lieten invullen. Heel veel dank daarvoor! Dank ook voor de oudere en ook jongere leraren die meegewerkt hebben aan het zelf invullen van vragenlijsten, en het laten invullen van vragenlijsten door hun leerlingen.

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CURRICULUM VITAE

Ietje Veldman was born in Maastricht, the Netherlands, on 23 August 1952. She attended secondary education at the Keizer Karel College in Amstelveen, where she graduated in 1970 with the diploma HBS-B. A year later she started her studies in Social Geography at the University of Amsterdam, where she graduated in 1978 with the specialization social geography and urban design. While studying for her master's degree, Ietje worked as a geography teacher at a school for secondary education, where she continued working after her graduation in 1978, until 1989. Since 1986, she has combined her work as a geography teacher in secondary education with work as a curriculum developer for environmental education at Utrecht University.

From 1993 she worked as a teacher educator, and later as director of teacher education, at Utrecht University. In the period from 2003 until 2013, she was director of teacher education at ICLON, Leiden University. From 2013 until present, she has worked as dean of the School of Education at the Amsterdam University of Applied Sciences.

Working in the field of teacher education, her interest in scientific research increased. She had a special interest in investigating the interpersonal processes in the classroom, as these could be a major success factor for student learning and the well being of teachers. She was involved in various research projects at Utrecht University. In 2010 she started her own research project, focused on veteran teachers and their interpersonal processes in the classroom.

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