

Teachers' interpersonal role identity

Citation for published version (APA):

Want, van der, A. C. (2015). Teachers' interpersonal role identity. [Phd Thesis 1 (Research TU/e / Graduation TU/e), Eindhoven School of Education]. Technische Universiteit Eindhoven.

Document status and date:

Published: 17/11/2015

Document Version:

Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

Link to publication

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- · Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
 You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.tue.nl/taverne

Take down policy

If you believe that this document breaches copyright please contact us at:

openaccess@tue.nl

providing details and we will investigate your claim.

Download date: 16. Nov. 2023

TEACHERS' INTERPERSONAL ROLE IDENTITY

ANNA VAN DER WANT

Teachers' Interpersonal Role Identity

Anna Cathalijne van der Want







Netherlands Organisation for Scientific Research

This dissertation was financially supported by the Netherlands Organization for Scientific Research (NWO, Grant number NWO/NRO 411-07-360) and facilitated by the Eindhoven School of Education (Eindhoven University of Technology). The research was carried out in the context of the Interuniversity Center for Educational Sciences (ICO).

A catalogue record is available from the Eindhoven University of Technology Library.

ISBN: 978-90-386-3941-3

NUR:841

Printed by: Mostert & van Onderen!

Omslagontwerp: Carline Vrielink

Copyright © Anna van der Want

Teachers' Interpersonal Role Identity

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Technische Universiteit Eindhoven, op gezag van de rector magnificus prof.dr.ir. F.P.T. Baaijens, voor een commissie aangewezen door het College voor Promoties, in het openbaar te verdedigen op dinsdag 17 november 2015 om 16:00 uur

door

Anna Cathalijne van der Want

geboren te Leiden

Dit proefschrift is goedgekeurd door de promotoren.

De samenstelling van de promotiecommissie is als volgt:

voorzitter: prof.dr. W. M. G. Jochems

1^e promotor: prof.dr. P. J. den Brok

2^e promotor: prof.dr. D. Beijaard

copromotor: prof.dr. J. M. G. Brekelmans (Universiteit Utrecht)

leden: prof.dr. W. F. Admiraal (Universiteit Leiden)

prof.dr. A. Aelterman (Universiteit Gent)

dr. S. F. Akkerman (Universiteit Utrecht)

prof.dr.ir Y. A. W. de Kort

Preface

The research reported in this dissertation was conducted as a part of a larger research project entitled *Development of teacher competence during the professional career: An interpersonal perspective*' and was financed by the Netherlands Organization for Scientific Research [Grant Number NWO/NRO 411-07-360]. This interlinked research project consisted of three PhD projects, one of which is presented in this dissertation and focuses on teacher identity. The other two focus on teacher behavior and teacher knowledge. The same teachers from secondary schools participated in all three projects and data collection was jointly undertaken by the three PhD's. Although the interlinked research project will result in three separate dissertations, the researchers closely collaborated. This close collaboration is for example visible in co-authorship of the three PhD candidates in each other's (submitted) articles.

The collaboration among the researchers also resulted in a case study on the role of the teacher regarding the social climate of the classroom published in Dutch (Claessens, Pennings, van der Want, Brekelmans, den Brok, & van Tartwijk, 2014¹). Data on teachers' self-efficacy, work engagement and burnout (used in this dissertation in chapter 4 and chapter 5) was collected in the context of this interlinked research project.

¹ Claessens, L. C. A., Pennings, H. J. M., van der Want, A. C., Brekelmans, M., den Brok, P., & van Tartwijk, J. (2014). De docent en het sociale klimaat in de klas: Een exploratieve studie naar verschillende aspecten van docent-leerling relaties. [Teacher and social class climate: An explorative study of different aspects of the teacher-student relationship] *Pedagogische Studiën*, *95*(5), 302-317.

Table of Contents

CHAPTER 1: GENERAL INTRODUCTION	1
1.1 Focus of the study	2
1.2 CONCEPTUAL FRAMEWORK	3
1.3 CONTEXT OF THE STUDY	10
1.4 PROBLEM STATEMENT AND RESEARCH QUESTIONS	11
1.5 RELEVANCE OF THE STUDY	11
1.6 OVERVIEW OF THE DISSERTATION	12
CHAPTER 2: THE INTERPERSONAL ROLE IDENTITY: IDENTITY STANDARD AND	
APPRAISAL OF SPECIFIC CLASSROOM SITUATIONS	15
2.1 Introduction	17
2.2 Theoretical framework	20
2.3 METHOD	24
2.4 Analysis	28
2.5 RESULTS	34
2.6 DISCUSSION AND CONCLUSION	40
2.7 Limitations, implications, and opportunities for further research	43
CHAPTER 3: A LONGITUDINAL STUDY OF TEACHERS'INTERPERSONAL ROLE ID	ENTITY
	45
3.1 Introduction	47
3.2 Theoretical framework	50
3.3 METHOD	54
3.4 Analysis	58
3.5 RESULTS	61
3.6 DISCUSSION	68
3.7 LIMITATIONS, IMPLICATIONS, AND OPPORTUNITIES FOR FURTHER RESEARCH	71
3.8 CONCLUSION	72
CHAPTER 4: THE RELATION BETWEEN TEACHERS' INTERPERSONAL ROLE IDEN	JTITY
AND THEIR WELLBEING	73
4.1 Introduction	75
4.2 Background of the study	79
4.3 Research question	85
4.4 Method	85
4.5 Analysis	90

4.6 RESULTS	90
4.7 DISCUSSION AND CONCLUSION	93
4.8 LIMITATIONS	95
4.9 Suggestions for further research	96
4.10 PRACTICAL IMPLICATIONS	96
CHAPTER 5: EXPLORING CHANGES IN TEACHERS' INTERPERSONAL ROLE	IDENTITY 99
5.1 Introduction	101
5.2 METHOD	102
5.3 Analysis	105
5.4 RESULTS	106
5.5 CONCLUSION AND DISCUSSION	111
CHAPTER 6: CONCLUSIONS & DISCUSSION	115
6.1 Main Findings and conclusions	116
6.2 DISCUSSION OF THE MAIN RESULTS	120
6.3 STRENGTHS, LIMITATIONS AND SUGGESTIONS FOR FURTHER RESEARCH	122
6.4 IMPLICATIONS FOR PRACTICE	125
REFERENCES	127
SUMMARY	133
SAMENVATTING	141
LIST OF PUBLICATIONS	151
CURRICULUM VITAE	155
DANKWOORD	157
ESOE DISSERTATION SERIES	160

Chapter 1

General introduction

1.1 Focus of the study

Positive relationships with students are important for teachers in all phases of their professional career (Day, Sammons, Kington, Gu, & Stobart, 2006). Teachers interact with students every day and give meaning to these interactions in relation to themselves as professionals. Relationships with students are at the core of teachers' professional identity (Beijaard, 1995) and have a strong impact on their wellbeing (van Petegem, Creemers, Rossel, & Aelterman, 2005), attrition in the beginning and stress later in their career (Evertson & Weinstein, 2006; Ingersoll & Smith, 2003; MacDonald, 1999; Tatar & Horenczyk, 2003; Veenman, 1984). However, not much is known about how teachers give meaning to their interactions with students in specific classroom situations (appraisals) and how this process of meaning making influences their interpersonal frame of reference (interpersonal identity standard). In addition, it is unknown whether teachers' interpersonal role identity (or one of the elements: appraisal or interpersonal identity standard) changes over time, which factors may possibly influence such a change, and how the process of matching between someone's interpersonal identity standard and appraisal of specific classroom situations takes place. Little is known about the consequences of having a (mis)matching interpersonal identity standard and appraisal of specific classroom situations. Burke and Stets (2009) stated that people without a match will experience stress and therefore try to have a matching interpersonal identity standard and appraisal of specific situations, but empirical evidence for this in the context of teaching is scarce. Insight into these processes may be helpful for (beginning) teachers to become aware of and reflect upon the separate elements of their interpersonal role identity, and to work actively towards a more or better matching between both the elements and thus improving their interpersonal role identity.

In this dissertation, we will therefore focus on the meaning teachers give to their relationship with students in the classroom, from now on referred to as *teachers' interpersonal* role identity.

1.2 Conceptual framework

This study focuses on teachers' interpersonal role identity which is – following Burke and Stets (2009) – conceptualized as consisting of two elements: interpersonal identity standard and appraisals of classroom situations, including the way these two elements interact. Furthermore, we will study whether teachers' interpersonal role identity is related to their wellbeing and whether personal factors can explain changes in their interpersonal role identity. A schematic overview of the components discussed in this dissertation can be found in Figure 1.1. In the following sections these components are described in more detail.

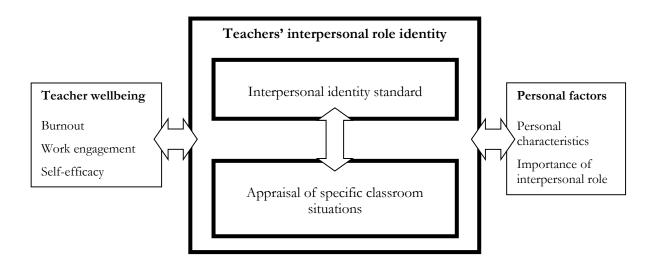


Figure 1.1. Schematic overview of the dissertation

1.2.1 Teachers' interpersonal role identity

A teacher has several roles to enact while teaching, varying from being a subject matter expert to an interpersonal expert who interacts and builds a relationship with students. The result of the meanings a teacher attributes to him/herself regarding a particular role is called one's role identity (Burke & Stets, 2009). Following Burke and Stets (2009), role identity is seen as a system in which two main aspects influence each other. Firstly, the *identity standard*: a frame of reference which consists of the set of self-relevant meanings or ideas that define the character of one's role identity. Whereas according to Burke

and Stets (2009) the identity standard includes both the perceived and desired frame of reference of a teacher, in our study we focus on the perceived frame of reference of the teacher. The focus on the perceived frame of reference enables us to analyze and compare both aspects of the interpersonal role identity in their current state of existence, rather than in an idealized state. In this study, the *interpersonal* identity standard is thus defined as the perceived *interpersonal* frame of reference of a teacher. Secondly, the *appraisal* of a situation: the process of evaluating a situation with respect to its importance for and effect on a person's wellbeing. In this study, appraisals of situations pertain to teachers' appraisals of situations from an interpersonal perspective. Both the interpersonal identity standard and the appraisal of a situation influence each other: someone's appraisal of a situation is influenced by and will influence his or her interpersonal identity standard.

The concept of appraisal can be understood as the process of evaluating a situation with respect to its importance and effect on a teacher's wellbeing (cf. Admiraal, 1994; Admiraal, Korthagen, & Wubbels, 2000; Arnold, 1960; Lazarus & Folkman, 1984). The appraisal literature distinguishes different elements of an appraisal (cf. Admiraal, 1994; Admiraal et al., 2000; Lazarus & Folkman, 1984; Scherer, Schorr, & Johnstone, 2001). Often, a distinction is made between an *affective appraisal* (in some studies referred to as 'first' or 'primary' appraisal) and an *evaluative appraisal* (in some studies referred to as 'second' or 'secondary' appraisal), which together form the appraisal process.

The affective appraisal, summarized by the question "am I in trouble or being benefited, now or in the future and in what way?" (Lazarus & Folkman, 1984, p. 31) is often expressed in an emotion or feeling and can be divided into three kinds: irrelevant, benign-positive, and stressful (Lazarus & Folkman, 1984). When a situation is appraised as *irrelevant*, this means that a teacher experiences no implications for his/her wellbeing and the situation impinges on no value, need, or commitment or other part of the teacher's identity standard. *Benign-positive* appraisals can be found in classroom situations that teachers experience as enhancing or preserving their wellbeing. When an event is appraised as *stressful*, a teacher evaluates it as being harmful or threatening for him/herself.

The evaluative appraisal is a complex evaluative process that takes the following factors into account: (1) which options are available to deal with the situation, (2) the chance that a given option will accomplish what it is supposed to (outcome expectation),

and (3) the chance that one can apply a particular strategy or set of strategies effectively (efficacy expectation). The central question for the evaluative appraisal is "what can and might be done about it?", and "who is accountable for this situation?" (Lazarus & Folkman, 1984, p. 35).

The interpersonal identity standard represents the more stable component of a person's role identity (as compared to the less stable appraisals of situations). It functions as a frame of reference hat "defines the character of the role identity according to the individual" (Burke & Stets, 2009; pp. 32, 63). In line with Burke and Stets (2009), we assume that teachers tend to verify their interpersonal identity standard in classroom situations. In a situation in which the identity standard is confirmed during the appraisal, interpersonal role identity verification occurs: appraisals of specific classroom situations by the teacher are consistent with a teacher's interpersonal identity standard. A lack of identity verification occurs when teachers' appraisals of such situations do not match with their interpersonal identity standards. The consequences of a lack of identity verification according to the literature are not evident. When there is a lack of identity verification, "(...) people become upset or distressed in varying degrees" and thus will try to change this mismatch of their appraisals and identity standard into a matching couple (Burke & Stets, 2009, p. 208). This can be done by either changing the appraisal of a situation ('maybe the classroom was not as chaotic as I thought it was') or by changing the identity standard ('maybe in general students do not have to be quiet all the time and listen to me, it can be good for them to chitchat a bit and walk around every now and then').

1.2.2 Interpersonal relationships

In this dissertation, we focus on the interpersonal relationship between teachers and their students; further referred to as the teacher-student relationship. Teacher-student relationships can be conceptualized and described in terms of two dimensions that are both independent and necessary to give a complete picture of the teacher-student relationship: a control dimension and an affiliation dimension (Wubbels, Brekelmans, van Tartwijk, & den Brok, 2006). Both dimensions can be used to describe the teacher-student relationship from a teacher and a student perspective. In this study, the evaluative appraisal and the interpersonal identity standard are analyzed from a teacher perspective on the teacher-

student relationship by means of the Teacher Interpersonal Circle, which is based on these two dimensions (Wubbels et al., 2006). Previous studies have shown the value of depicting interpersonal relationships between students and teachers using the Teacher Interpersonal Circle (den Brok, Brekelmans, & Wubbels, 2004; den Brok, van Tartwijk, Wubbels, & Veldman, 2010; de Jong, van Tartwijk, Wubbels, Veldman, & Verloop, 2012; Wubbels & Brekelmans, 2005). As said, the Teacher Interpersonal Circle consists of two dimensions: (1) the control dimension represents the degree of control/influence the teacher has (as experienced by the students) when interacting with students, and (2) the affiliation dimension represents the degree of cooperation or opposition between the teacher and the students (as experienced by the students). The two dimensions are shown by Figure 1.2 and divide behaviors into eight different interpersonal categories depending on different combinations of the level of the control and affiliation dimensions: (1) steering (e.g., lead, set tasks), (2) friendly (e.g., assist, make a joke), (3) understanding (e.g., listen with interest, show confidence), (4) accommodating (e.g., give freedom and responsibility), (5) uncertain (e.g., apologize, wait and see what happens), (6) dissatisfied (e.g., show dissatisfaction, criticize), (7) reprimanding (e.g., forbid, correct), and (8) enforcing (e.g., be strict, keep reins tight).

Drawing upon previous studies in which the teacher-student relationship was related to student outcomes and teacher wellbeing (Wubbels et al., 2006) two kinds of interpersonal identity standards were distinguished for the present study: healthy and unhealthy interpersonal identity standards (Figure 1.2). *Healthy* interpersonal identity standards (e.g., being steering, friendly, understanding) are negatively related to teachers' stress and positively related to student outcomes and can be described as having a high level of control combined with a high level of affiliation in terms of the Teacher Interpersonal Circle. *Unhealthy* interpersonal identity standards (e.g., being uncertain, dissatisfied, reprimanding) are positively related to teachers' stress and negatively related to student outcomes and can be described as having a low level of control combined with a low level of affiliation.

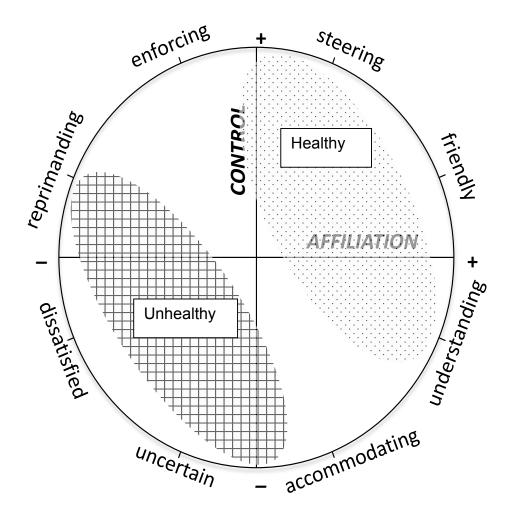


Figure 1.2. Teacher Interpersonal Circle depicting healthy and unhealthy areas of interpersonal identity standards (cf. Wubbels et al., 2006)

1.2.3 Wellbeing

Following Eder (1995, 2002) teachers' wellbeing pertains to their emotional state related to work - either positively or negatively - and includes their beliefs in their own ability to teach. In several studies, wellbeing has been investigated by studying its related aspects, among which self-efficacy, burnout, and work engagement (Spilt, Koomen, & Thijs, 2011; Engels Aelterman, Petegem, & Schepens, 2004). *Wellbeing* is regarded in this study as an overarching concept with three of its related aspects: self-efficacy, burnout and

work engagement. Self-efficacy is defined as the extent to which a person believes that he or she has the capacity to affect desired outcomes (Brouwers & Tomic, 2000; Tschannen-Moran & Woolfolk Hoy, 2001). Self-efficacy can be conceptualized with the following teaching related themes: classroom management, student engagement, and instructional strategies (Tschannen-Moran & Woolfolk Hoy, 2001). Classroom management efficacy refers to a teacher's belief to be able to develop and maintain classroom order. Student engagement efficacy refers to a teacher's belief to be able to motivate students and to engage them in their own learning process. Instructional strategy efficacy refers to a teacher's belief to be able to use various didactical techniques in the classroom. Burnout is defined here as "a prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach, Schaufeli, & Leiter, 2001, p. 397) and consists of three themes: emotional exhaustion, cynicism/depersonalization, and individuals' feelings of reduced personal accomplishment (Brouwers & Tomic, 2000). Exhaustion, the most obvious manifestation of burnout refers to energy depletion and is characterized by severe physical, mental, and emotional fatigue. Cynicism is an attempt to distance oneself from the job, by actively developing negative attitudes towards it. Reduced personal accomplishment is the tendency to evaluate one's work negatively. Work engagement is considered as the positive antipode of burnout, and is defined as a fulfilling state of mind in employees that is characterized by vigor, dedication, and absorption (Schaufeli, & Bakker, 2003). Vigor refers to high levels of energy and resilience while working, the willingness and ability to invest effort in one's job, and persistence in the face of difficulties. Dedication denotes a strong involvement in one's work, accompanied by feelings of enthusiasm and significance, and by a sense of pride and inspiration. Absorption refers to a pleasant state of total concentration on one's work, which is characterized by time passing quickly and being unable to detach from the job.

1.2.4 Personality, role perception and importance of teacher-student relationships

Teachers' personality has been found to be important for the prediction of student teachers' professional identity development (Schepens, Aelterman, & Velrick, 2009). Erdle, Murray, and Rushton (1985) found that 50% of the relationship between teacher personality and student ratings is mediated by specific classroom behavior by the teacher. 'Extraversion' seems to be the most viable indicator of effective teaching (Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005; Murray, Rushton, & Paunonen, 1990). Murray, Rushton, and Paunonen (1990) also found that the themes 'extraversion' and 'intellect' were good indicators for teachers who perform excellent in various educational settings. Poor performing teachers seemed to have low 'extraversion' and low 'emotional stability' scores. Furthermore, low 'emotional stability' and high 'introversion' were related to teacher burnout, and also seemed to be related to low values attached by teachers to interpersonal relationships with students (Cano-Garcia et al., 2005).

Following Beijaard, Verloop, and Vermunt (2000) and Burke and Stets (2009), we presume that every teacher has a certain hierarchy of importance concerning the different teacher roles (i.e., the subject matter role, didactical role, pedagogical role, and interpersonal role). Teachers who place the interpersonal role high in the hierarchy of their professional roles are expected to find the teacher-student relationship important and more likely to have or strive towards a healthy or positive teacher-student relationship. Therefore, in this dissertation we are also interested in the (relative) importance teachers attribute to the interpersonal role.

1.3 Context of the study

The research reported in this dissertation was conducted as a part of a larger research project entitled *Development of teacher competence during the professional career: an interpersonal perspective*' and was financed by the Netherlands Organization for Scientific Research [Grant Number NWO/NRO 411-07-360]. This interlinked research project consisted of three PhD projects, one of which is presented in this dissertation and focuses on teacher identity. The other two focus on teacher behavior and teacher knowledge. In studying the development of teacher competencies during their professional career we used insights from dynamic systems (DS) theory (Granic & Hollenstein, 2003; Pennings, van Tartwijk, Wubbels, Claessens, van der Want, & Brekelmans, 2014; Thelen & Smith, 2006). Dynamic systems theory aims at understanding changing patterns in moment-to-moment interactions in relation to changes in interpersonal relations at a longer time scale (Thelen & Smith, 2006). In dynamic systems theory moment-to-moment interactions are also referred to as a micro-social processes and the longer timescale as macro-social processes. In this dissertation on the interpersonal role identity, we study appraisals as micro-social processes and interpersonal identity standards as macro-social processes.

A selection of 29 of 180 teachers from secondary schools who responded to our invitation to participate in the interlinked research project participated in all three projects. Based on some background variables and the teacher's interpersonal expertise (as perceived by the students of one class of the teacher), the participants for the research of this dissertation were selected. The 29 teachers were from 25 secondary schools in different parts of the Netherlands and were teaching various subject to students in different classes, year groups and levels (from pre-vocational education to pre-university education). The teachers differed in age, gender, years of experience and teacher training background/degree. All teachers participated voluntarily in this research.

1.4 Problem statement and research questions

Previous research has shown the importance of teachers' professional identity and teacher-student relationships for teachers' wellbeing. However, not much is known about how teachers give meaning to their interactions with students in specific classroom situations (appraisals) and how this process of meaning making influences their interpersonal frame of reference (interpersonal identity standard). In addition, it is unknown whether teachers' interpersonal role identity (or one of the elements: appraisal or interpersonal identity standard) changes over time, which factors may possibly influence such a change, and how the process of matching between someone's interpersonal identity standard and appraisal of specific classroom situations takes place. Therefore, the central question to be answered in this study was: *How do teachers' interpersonal role identities manifest themselves in teachers' interpersonal identity standards and in their appraisal of classroom situations?*

The following more specific questions to be answered in this dissertation were:

- (1) How do teachers appraise specific classroom situations and how is this related to their interpersonal identity standard? (Chapter 2)
- (2) How does teachers' interpersonal role identity change over a period of two years? (Chapter 3)
- (3) How does teacher wellbeing in terms of self-efficacy (a), burnout (b), and work engagement (c), differ between healthy matching teachers, healthy mismatching teachers and unhealthy (mis)matching teachers? (Chapter 4)
- (4) Which factors affect the change of teachers' interpersonal role identity? (Chapter 5)

1.5 Relevance of the study

The research described in this dissertation has theoretical as well as practical relevance. The theoretical relevance pertains to the conceptualization of teacher role identity into a framework consisting of two elements: the appraisal of classroom situations and the interpersonal identity standard. By choosing a specific role and focusing on these two elements and underlying processes, another, more detailed way of studying teachers' professional identity has been introduced when compared to the existing, often holistic

ways in which teachers' professional identities have been studied thus far. This dissertation also provides a new perspective on teacher-student relationships by focusing on the meaning teachers give to specific classroom situations (appraisal), their perceived relationship with students in general (identity standard), and how both influence each other.

From a practical point of view the framework described in this dissertation can be used as a tool for teachers to become aware of (changes in) their appraisals and their interpersonal identity standard. By using the Teacher Interpersonal Circle to analyze teachers' evaluative appraisals and interpersonal identity standard, teachers' interpersonal role identity is made visible and concrete and therefore easier to depict, discuss and compare with those of other teachers. Looking at the appraisal of various situations will help to clarify which situation is of specific importance for an individual teacher. Thus, the appraisal or interpersonal identity standard can be an impetus to further reflect on teacher-student relationships, to practice specific situations or to reflect upon the position of the interpersonal role identity towards other role identities of a teacher. This might be important for both teacher education and the further professional development of teachers.

1.6 Overview of the dissertation

This dissertation consists of six chapters. In Chapter 1 (this chapter) general background information about the topic of this dissertation is provided. In Chapter 2 the conceptual framework of teachers' interpersonal role identity is presented and illustrated with empirical data of 29 teachers. Semi-structured and video-stimulated interviews were used to collect data about teachers' appraisals and interpersonal identity standards. The findings show the variety of interpersonal identity standards and the extent to which teachers' interpersonal identity standards match with their appraisals.

The research described in Chapter 3 focuses on the change of teachers' interpersonal role identity over time. For this purpose, 24 of the teachers reported on in Chapter 2 were interviewed (both semi-structured and video-stimulated) at two moments in time, in 2011 and 2013. In this chapter, the different patterns of change in both teachers' appraisals of specific situations and their interpersonal identity standards are reported. Next to that, the patterns of change were categorized using the Teacher Interpersonal Circle.

The relation between teachers' interpersonal role identity and teachers' wellbeing is reported in Chapter 4. Data on teacher wellbeing was collected using questionnaires about self-efficacy, burnout, and work engagement. The results show trends in the relation between self-efficacy, burnout and work engagement on the one hand and teachers' interpersonal role identity on the other.

Chapter 5 presents an exploration of the possible factors (self-efficacy, personality, work engagement, burnout, and the perceived importance of teacher-student relationships) affecting change in teachers' interpersonal role identity over time. We examined data of 8 teachers who experienced a change concerning their interpersonal role identity over time from healthy mismatcher (i.e., their interpersonal identity standard was healthy but did not match their appraisals of classroom situations) to healthy matcher (i.e., their interpersonal identity standard was healthy and did match their appraisals of classroom situations). The results show the possible importance of different factors in this process of change from healthy mismatcher to healthy matcher.

In Chapter 6 the main results and points for discussion are reported, followed by the limitations of the study, implications for practice, and suggestions for further research.

The chapters 2, 3, and 4 were written as independent articles and published in or submitted to different journals in the field of teaching and teacher education. For that reason, some overlap in theoretical and methodological framework exists.

Chapter 2

The interpersonal role identity: identity standard and appraisal of specific classroom situations²

² This chapter has been published in adapted form as: van der Want, A. C., den Brok, P., Beijaard, D., Brekelmans, M., Claessens, L. C. A., & Pennings, H. J. M. (2014). Teachers' Interpersonal Role Identity. *Scandinavian Journal of Educational Research*. Advance online publication. Doi: 10.1080/00313831.2014.904428.

Abstract

This chapter investigated the link between teachers' appraisals of specific situations in classrooms and their more general interpersonal identity standard, which together form their interpersonal role identity. Using semi-structured and video-stimulated interviews, data on teachers' appraisals and interpersonal identity standards were collected and analyzed using appraisal and interpersonal circumplex theory. Results showed a variety of interpersonal identity standards, although the majority of the teachers mentioned standards that could be coded as steering and being friendly. Most benign-positive affective appraisals were found for the situation 'reacting to student positive behavior.' For 13 of the 29 teachers, their identity standard matched with their appraisals. In most cases, however, this match was only partial (10 teachers) and sometimes not at all (six teachers). The results suggested that teachers could enhance their relationship with students by becoming more aware of the meanings teachers attach to this relationship in specific situations.

2.1 Introduction

During the last two decades, an increasing number of studies have focused on the professional identity of teachers (e.g., Beauchamp & Thomas, 2009; Beijaard, Meijer, & Verloop, 2004). In these studies, the teacher-student relationship was found to play an important role. For example, Sikes, Measor, and Woods (1991) argued that the teacherstudent relationship is one of the major features of teachers' professional identity. Furthermore, O'Connor (2008) showed in an ethnographical study that a positive professional relationship with students is seen by teachers as "being an integral part of their professional identity" (p. 121). Next to that, in a study on secondary school teachers' professional identities, Beijaard (1995) elicited 14 themes that - in his opinion - were relevant for shaping teachers' professional identity. The themes were the results of a literature study on professional identity. The majority of the 14 themes were related to teacher-student relationships, namely: (1) respect for students; (2) respect of students; (3) interaction with students; (4) bond with students; (5) preference for (certain groups of) students; (6) keeping distance from students; (7) affective neutrality; and (8) commitment to helping students. Novice teachers face many identity-related tensions and problems that pertain to classroom management and developing a good relationship with students (Ingersoll & Smith, 2003; Macdonald, 1999; Pillen, Beijaard, & den Brok, 2013a; Veenman, 1984; Volkmann & Anderson, 1998). In this study, we will therefore focus on the professional identity of teachers concerning the teacher-student relationship, henceforth referred to as teachers' interpersonal role identity.

The interpersonal role identity is a specific part of the professional identity of teachers, since it focuses on the element of teacher identity that deals with the teacher-student relationship. A teacher has several roles to enact while teaching, varying from being a subject matter expert to an interpersonal expert who interacts and builds a relationship with students. The result of the meanings teachers attribute to themselves while in a particular role is called their role identity. The internalized set of meanings related to teacher-student relationships that teachers apply to themselves and enact in practice is called the interpersonal role identity (Burke & Stets, 2009). Following Burke and Stets (2009), the interpersonal role identity is seen as a system in which two main aspects influence each other: first, the interpersonal appraisal, which is the process of evaluating a

classroom situation with respect to its importance and effect for a teacher's wellbeing; second, the interpersonal identity standard, a frame of reference that consists of the set of self-relevant meanings or ideas that define the character of the role identity. In this study, the interpersonal identity standard is defined as the interpersonal frame of reference of a teacher. Both the appraisal and the identity standard influence each other: someone's appraisal is influenced by and will influence one's interpersonal identity standard. Teachers' interpersonal role identity is in this study empirically investigated by using semi-structured interviews to collect data about their interpersonal identity standard and by using video-stimulated semi-structured interviews to collect data about their appraisals.

Despite the acknowledged importance of professional identity on the one hand and teacher-student relationships on the other, empirical research about a specific role identity, such as the interpersonal role identity, or the effect of appraisals of specific classroom situations on interpersonal identity standards, is, to our knowledge, non-existent. Therefore, a first step in exploring the interpersonal role identity is to study the two elements of the interpersonal role identity as well as their associations, using a descriptive approach. By doing so, insight will be gained into the interpersonal role identity, enabling, for instance, teacher educators to elicit the appraisal processes of specific classroom situations and interpersonal identity standards of student teachers.

This study aims to explore this interpersonal role identity by focusing on teachers' appraisals of classroom situations and how these are related to their interpersonal identity standards. The study was shaped by the central research question: *How do teachers appraise specific classroom situations and how is this related to their interpersonal identity standard?*

For the purpose of this study, a conceptual framework was formed - the framework of the interpersonal role identity - consisting of two elements: the appraisal and the interpersonal identity standard.

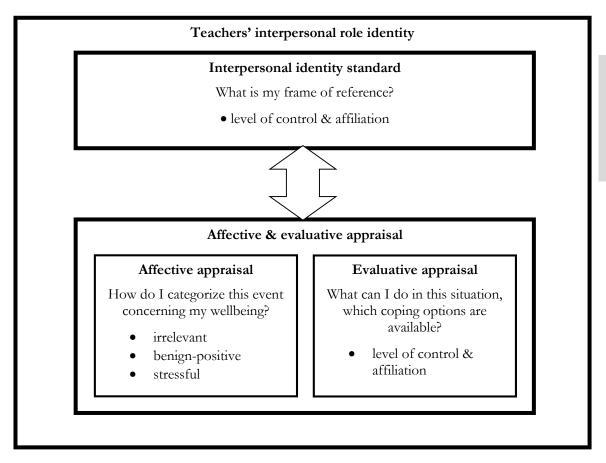


Figure 2.1. Conceptual framework of the interpersonal role identity

In Figure 2.1, the interaction between the interpersonal identity standard and the appraisal of the situation is displayed. Every person experiences and evaluates situations. During this evaluation, the appraisal of the situation is compared with someone's frame of reference: the interpersonal identity standard. The conceptual framework of the interpersonal role identity we use in this study (Figure 2.1) draws upon the identity theory of Burke and Stets (2009, p. 65) in which the appraisal of a situation (cf. Admiraal, 1994; Admiraal et al., 2000; Lazarus & Folkman, 1984) influences and is influenced by the interpersonal identity standard.

For example, when at the start of the lesson the students enter the classroom talking loudly to each other, teachers can evaluate this situation in different ways: s/he can think that it is important to let the students settle down and have a minute to talk informally to their peers, or s/he can think that it is very important to use all the available time to teach the subject to the students and therefore everyone should be quiet and be prepared to begin the lesson immediately. Depending on his or her interpersonal identity standard, a teacher

will evaluate a situation differently and, consequently, will also behave differently. This interpersonal identity standard is thus influenced by and influences the appraisal of a situation.

Taken together, the appraisal and the interpersonal identity standard are someone's interpersonal role identity. This study aims to explore the interpersonal role identity by focusing on teachers' appraisals of classroom situations and how these are related to their interpersonal identity standards. Insight into the interpersonal role identity can help teacher educators to understand how (student) teachers react in specific classroom situations interpersonally. From previous research, we know that novice teachers face many dilemmas and problems that pertain to developing a good relationship with students (Ingersoll & Smith, 2003; Macdonald, 1999; Veenman, 1984; Volkmann & Anderson, 1998).

2.2 Theoretical framework

2.2.1 The appraisal of classroom situations and the interpersonal identity standard

The concept of appraisal can be understood as the process of evaluating a situation, with respect to its importance and effect on a teacher's wellbeing (cf. Admiraal, 1994; Admiraal et al., 2000; Arnold, 1960; Lazarus & Folkman, 1984). Consciously or unconsciously, the appraisal process takes place continuously: every situation is evaluated by individuals (Am I in trouble? Is this harmful for myself? What should I do now?). In line with Burke and Stets (2009, p. 27-28), the appraisal process is the starting point of the interpersonal role identity, which guides the behavior of the person. The appraisal literature distinguishes different elements of an appraisal (cf. Admiraal, 1994; Admiraal et al., 2000; Lazarus & Folkman, 1984; Scherer et al., 2001). A distinction is often made between an affective appraisal (in some studies referred to as 'first' or 'primary' appraisal) and an evaluative appraisal (in some studies referred to as 'second' or 'secondary' appraisal), which together form the appraisal process (Admiraal, 1994; Admiraal et al., 2000; Lazarus & Folkman, 1984).

The affective appraisal, summarized in the question "am I in trouble or being benefitted, now or in the future and in what way?", is often expressed in an emotion or

feeling and can be divided into three kinds: irrelevant, benign-positive, and stressful (Lazarus & Folkman, 1984). When a situation is appraised as *irrelevant*, this means that a teacher experiences no implications for his/her wellbeing/teaching and the situation impinges on no value, need, or commitment or other part of the teacher's identity standard. *Benign-positive* appraisals can be found in classroom situations that teachers experience as enhancing or preserving their wellbeing. When an event is appraised as *stressful*, a teacher evaluates it as being harmful or threatening to him/herself.

The evaluative appraisal is a complex evaluative process that takes the following factors into account: (1) which options are available to deal with the situation; (2) the likelihood that a given option will accomplish what it is supposed to (outcome expectation); and (3) the likelihood that one can apply a particular strategy or set of strategies effectively (efficacy expectation). The central question for the evaluative appraisal is "what can and might be done about it?", as well as "who is accountable for this situation?" (Lazarus & Folkman, 1984, p. 35).

Although someone's interpersonal role identity is continuously under (re)construction, there are certain components of a person's role identity which are more stable and function as a personal frame of reference (Burke & Stets, 2009). This frame of reference, the interpersonal identity standard, defines the character of the role identity according to the individual (Burke & Stets, 2009, p. 32, 63). In addition, a teacher's interpersonal identity standard represents the interpersonal ideals of the teacher (Burke & Stets, 2009).

According to Burke and Stets (2009), teachers continuously verify their interpersonal role identity in classroom situations. In a situation in which the identity standard is confirmed during the appraisal, interpersonal role identity verification occurs. Interpersonal role identity verification means that appraisals of the teacher in the situation are consistent with a teacher's interpersonal identity standard. A lack of identity verification occurs when the appraisal of the person in the situation does not match with the person's interpersonal identity standard (Burke & Stets, 2009, p. 116). If there is a lack of identity verification, "...people become upset or distressed in varying degrees" (Burke & Stets, 2009, p. 208). According to Burke and Stets (2009, p. 208), people will try to change this mismatch of appraisals and identity standard into a matching couple. This can be done by either changing the appraisal of a situation ('maybe the classroom wasn't as chaotic as I

thought it was') or by changing the identity standard ('maybe in general students do not have to be quiet all the time and listen to me, it can be good for them to chitchat a bit and walk around every now and then').

2.2.2 Interpersonal relationships

Teacher-student relationships can be conceptualized and described in terms of two dimensions that are both independent and necessary to give a complete picture of the teacher-student relationship: a control dimension and an affiliation dimension. In this study, the evaluative appraisal and the interpersonal identity standard are analyzed with the Teacher Interpersonal Circle (Wubbels et al., 2006).

Previous studies have shown the value for depicting interpersonal relationships between students and teachers with the Teacher Interpersonal Circle (Wubbels et al., 2006). The Teacher Interpersonal Circle consists of two dimensions: (1) The control dimension describes the degree of control the teacher has (as experienced by the students) when interacting with students and (2) the affiliation dimension describes the degree of cooperation or opposition between the teacher and the students. The two dimensions are shown in Figure 2.2 and divide behaviors into eight different interpersonal categories depending on different combinations of the level of the control dimension and affiliation dimension: (1) steering, (2) friendly, (3) understanding, (4) accommodating, (5) uncertain, (6) dissatisfied, (7) reprimanding, and (8) enforcing (Wubbels et al., 2006).

In this study, three classroom situations will be used to elicit appraisals. These classroom situations are the start of the lesson, reacting to student misbehavior, and reacting to positive student behavior. In previous research, all three classroom situations have been found to be important with respect to the teacher-student interpersonal relationship (Admiraal, 1994; Admiraal et al., 1996; Wubbels et al., 2006).

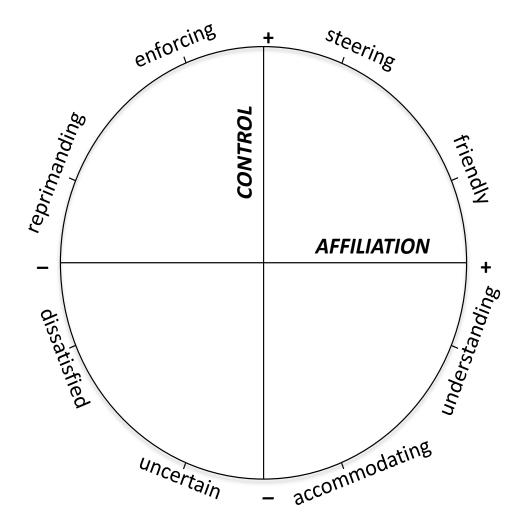


Figure 2.2. Teacher Interpersonal Circle (Wubbels et al., 2006)

2.2.3 Research questions

The study in this chapter was shaped by the central research question: *How do teachers appraise specific classroom situations and how is this related to their interpersonal identity standard?*Based on our theoretical framework, the main question can be subdivided into the following specific sub questions:

- 1. How do teachers appraise specific classroom situations from an interpersonal perspective?
- 2. What interpersonal identity standards do teachers report?
- 3. How are teachers' appraisals of specific classroom situations related to their interpersonal identity standards?

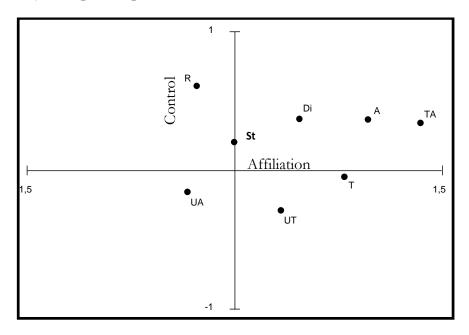
2.3 Method

2.3.1 Participants

This study was conducted among 29 teachers in secondary education schools in the Netherlands. Selection criterion for participation was their interpersonal expertise. To select participants, we invited teachers through large internet for by using a network of schools from teacher training institutes and by advertising in teacher magazines/journals. In total, 180 teachers (from 60 schools) responded to our calls. From these 180 teachers, a stratified sample of 29 secondary school teachers was selected according to the following procedure.

All 180 teachers were asked to distribute and complete the Questionnaire on Teacher Interaction (QTI) in one of their classes (Wubbels, Créton, & Hooymayers, 1985). From the 180 teachers, 135 teachers (and their students) returned the completed questionnaire to the researchers. The QTI measures the teacher-student interpersonal relationship in terms of the Teacher Interpersonal Circle (cf. Figure 2.2) as perceived by students (student perception), and by teachers (teacher perception). The student perception was used in this study to map the interpersonal relationships of the teachers. The outcome of the QTI was linked to several types or profiles of teacher-student relationships (e.g., Wubbels et al., 2006) representing a variety of teacher-student relationships in terms of the

two interpersonal dimensions (cf. Figure 2.3). The teachers who were selected to participate in this research had relationships with their pupils that could be characterized in terms of the eight types. The Authoritative (three teachers), Tolerant/Authoritative (three teachers) and Tolerant (three teachers) types are teachers who are seen by their students as being cooperative with them and having an influence on what happens in the classroom, without being strict or very dominant. The Directive (three teachers) type of teachers are regarded by their students as having a lot of influence on what happens in the classroom and being, to a certain degree, cooperative. The Uncertain/Tolerant (four teachers) and the Struggling (four teachers) types are valued by their students as less cooperative (than the other types), and have much less influence in the classroom. The Repressive (five teachers) and the Uncertain/Aggressive (two teachers) types of teachers are regarded by their students as hardly cooperative, in which the former type is very dominant, and the latter is not (Wubbels et al., 2006). As can be seen in Table 2.1 the selected teachers also differed in terms of subject taught and gender.



A = Authoritative, Di = Directive, St = Struggling, T = Tolerant, R = Repressive, TA = Tolerant/Authoritative, UA = Uncertain/Aggressive, UT = Uncertain/Tolerant.

Figure 2.3. Main points of the eight types of patterns of interpersonal relationships (Wubbels et al., 2006)

Table 2.1

General characteristics of the 29 participants

Name ¹	Gender	Age	Years of teaching experience	Subject taught	Interpersonal profile
Carin	Female	40	2	Dutch	Repressive
John	Male	25	1	Physics	Repressive
Andrew	Male	50	1	Chemistry	Struggling
Paul	Male	34	1	Physics	Struggling
Ben	Male	29	2	Social Studies	Directive
Matthew	Male	24	1	Physics	Authoritative
Peter	Male	28	2	Biology	Tolerant-Authoritative
Patrick	Male	43	1	Physics	Tolerant
Louise	Female	39	1	Physics	Uncertain-Tolerant
Jane	Female	28	1	Chemistry	Uncertain-Tolerant
Denise	Female	29	1	Chemistry	Uncertain-Aggressive
Joyce	Female	47	9	French	Repressive
Daniel	Male	46	8	Economics	Struggling
Dorothy	Female	42	9	Biology	Directive
Charlotte	Female	50	11	Dutch	Authoritative
Lucy	Female	35	12	Dutch	Tolerant-Authoritative
Billy	Male	35	11	Arts	Tolerant
David	Male	47	11	Physics	Uncertain-Tolerant
Beth	Female	40	10	Social Studies	Repressive
Michael	Male	34	11	History	Struggling
Jane	Female	56	34	Arts	Repressive
Rosy	Female	55	34	Economics	Struggling
Thomas	Male	59	35	Arts	Directive
Christine	Female	42	21	Physics	Authoritative
Luke	Male	50	25	Physics	Uncertain-Aggressive
Angel	Female	53	31	Latin	Tolerant-Authoritative
Mark	Male	53	22	Arts	Tolerant
Adrian	Male	54	26	Geography	Uncertain-Tolerant
Philip	Male	56	28	Geography	Repressive

¹ All names are fictitious for reasons of anonymity.

2.3.2 Data collection and procedure

In order to answer our research question about the appraisals of the three classroom situations (start of the lesson, reacting to student misbehavior, and reacting to positive student behavior) and identity standards of teachers, qualitative methods of data collection and analysis were chosen. As stated in the theoretical framework, the three selected classroom situations are all of major importance for teacher-student relationships and occur in each lesson. Two interviews per teacher, conducted on the same day, were used for data collection, and included one semi-structured interview and one video-stimulated interview. The semi-structured interview was conducted to gain insight into teachers' interpersonal identity standard; the video-stimulated interview, which was also semi-structured, was held to study teachers' appraisals of the three specific classroom situations.

The two interviews lasted approximately one hour in total and were conducted between March and September 2011. The interviews took place at the school of the teacher (with the consent of both school management and participant). Prior to the interviews, though on the same day, one of the teacher's lessons was video-taped and observed by the researcher (students were informed beforehand by the teachers and were given the opportunity not to be visible on camera).

The semi-structured interview was conducted prior to the video-stimulated interview and focused on the interpersonal identity standard of the teachers, including questions concerning the teacher's views on their teacher-student relationship.

The video-stimulated interview was conducted directly after the semi-structured interview and focused on the appraisal of the specific classroom situations. Using fragments of their video-taped lesson, the teacher was asked to watch and comment on specific fragments of the lesson in the following sequence: start of the lesson, reacting to student misbehavior, reacting to positive student behavior). All participants were asked first to watch and comment on the start of the lesson. Afterwards, all participants were asked to select two fragments: one fragment of student misbehavior and one fragment of positive student behavior. The participant was asked to indicate when the fragment started and finished. Therefore, the length of the fragments ranged from a few seconds to several minutes. Each teacher was asked to reflect on the fragments by answering three questions

per fragment, which are shown in Table 2.2. Each of the questions asked was related to one of the components of the theoretical framework. The first question dealt with the description of the situation, followed by questions regarding the affective and evaluative appraisal.

Table 2.2

Interview questions per fragment of the video-stimulated interview

Component	Question
Description	Can you describe this event?
	How relevant is this event for you?
Affective appraisal	What did you feel and think at that moment?
Evaluative appraisal	What were your options at that moment?
	What were you planning to do?

2.4 Analysis

To analyze the semi-structured interview, which focused on the interpersonal identity standard, the Teacher Interpersonal Circle (containing the categories steering, friendly, understanding, accommodating, uncertain, dissatisfied, reprimanding, and enforcing) was used.

To analyze the video-stimulated interview, which focused on the appraisals of the three classroom situations, two methods of analysis were used. The affective appraisal was analyzed with the three categories of Lazarus and Folkman (1984): (1) benign-positive, (2) stressful, and (3) irrelevant. The evaluative appraisal was analyzed, similar to the analysis of the interpersonal identity standard using the Teacher Interpersonal Circle (Wubbels et al., 2006). As mentioned in our theoretical framework, previous research has shown the value of the Teacher Interpersonal Circle in describing teachers' behavior (Wubbels et al., 2006). Since teachers describe their interpersonal identity standard and their evaluative appraisal in terms of their behavior, the Teacher Interpersonal Circle offers an excellent instrument for our analysis. An example of analyzed data can be found in Figure 2.4.

To test the usefulness and completeness of the coding categories for the analysis of the semi-structured and the video-stimulated interviews, 12 interviews (6 semi-

structured and 6 video-stimulated interviews) were randomly selected from the total of 58 interviews and were transcribed verbatim and coded using Atlas-ti 6.2. This resulted in a satisfying complete and yet comprehensive coding scheme.

All in all, for each respondent the following aspects were coded (see Table 2.3), which will be described more detailed in the following paragraphs.

Table 2.3

Aspect	Coding
Interpersonal identity standard	1-3 codes
	from Teacher Interpersonal Circle
Affective appraisal	1 code
of the start of the lesson	(benign-positive, stressfull, irrelevant)
Evaluative appraisal	1-3 codes
of the start of the lesson	from Teacher Interpersonal Circle
Affective appraisal	1 code
of reacting to student misbehavior	(benign-positive, stressfull, irrelevant)
Evaluative appraisal	1-3 codes
of reacting to student misbehavior	from Teacher Interpersonal Circle
Affective appraisal	1 code
of reacting to positive student behavior	(benign-positive, stressfull, irrelevant)
Evaluative appraisal	1-3 codes
of reacting to positive student behavior	from Teacher Interpersonal Circle

2.4.1 Semi-structured interview: the interpersonal identity standard

The following steps were undertaken in the process of analysis for the semistructured interview in order to answer our first research question concerning the interpersonal identity standard:

1. Relevant passages from the transcripted interviews were selected that pertained to teacher-student relationships in which the participant talked directly or indirectly about his/her identity standard. All relevant passages from the transcripted interviews were combined and considered as one fragment, being the unit of analysis.

- 2. Each fragment was given one or more codes from the Teacher Interpersonal Circle (steering, friendly, understanding, accommodating, uncertain, dissatisfied, reprimanding, and enforcing). The maximum number of codes given to one fragment was three, for most of the respondents, two codes were assigned. The weight of all codes was the same, no code was assigned to be dominant over other codes.
- 3. After six interviews had been transcribed and coded, a matrix was constructed in order to create an overview of the data. The matrix columns contained the participants and the rows showed the interpersonal identity standard.
- 4. The remaining 23 interviews were directly coded with one or more codes from the Teacher Interpersonal Circle in this matrix. Given the clarity of this procedure and the high interrater reliability of the codes (see section 2.4.3), the coding process was undertaken by the researcher who also conducted the interviews.

2.4.2 Video-stimulated interview: affective and evaluative appraisal

In order to analyze the affective and evaluative appraisal, the video-stimulated interview data was analyzed. For the video-stimulated interview, similar steps were taken as for the analysis of the semi-structured interview. After the first step, each fragment was further analyzed by labeling with codes related to the affective appraisal (benign-positive, stressful, and irrelevant) and codes related to the evaluative appraisal (steering, friendly, understanding, accommodating, uncertain, dissatisfied, reprimanding, and enforcing).

2.4.3 Inter-rater reliability

A second researcher coded the interview fragments of ten participants. Per participant, all classroom situations were coded for the affective and evaluative appraisal as well as his/her interpersonal identity standard. The coding by the first and second researcher showed an agreement of 84% for the coding of the affective appraisals. For the evaluative appraisal, inter-rater reliability was calculated by comparing the most prominent codes per situation for each appraisal (since for the evaluative appraisal several codes could be assigned to a situation, it was decided to mark the most prominent code in the coding

per fragment). This resulted in an agreement of 94%. After discussion of the fragments on which no initial agreement was found, agreement on all the coded fragments was found (100%). For the interpersonal identity standard, the same procedure as for the affective appraisals was followed. This resulted in an initial agreement of 83% of the codes, and after discussion agreement on all coded fragments was found (100%).

2.4.4 Analysis of identity verification: four levels

In order to answer the third sub question (How are teachers' appraisals of specific classroom situations related to their interpersonal identity standards?), we compared the interpersonal identity standards (first sub question) with the evaluative appraisals teachers gave to the specific classroom situations (second sub question). A (strong) correspondence between a teacher's appraisal of specific classroom situations and his or her interpersonal identity standard is, following Burke and Stets (2009), called interpersonal role identity verification.

In our coding system with the eight codes (steering, friendly, understanding, accommodating, uncertain, dissatisfied, reprimanding, and enforcing), we distinguished four levels of interpersonal identity verification:

- 1. <u>Identity verification</u>: The coding of the interpersonal identity standard matches with the coding of the appraisals.
- 2. Almost identity verification: The codes of the interpersonal identity standard and the evaluative appraisals were not identical, but were positioned directly next to each other in the categories of the Teacher Interpersonal Circle. Looking at, for instance, the start of the lesson, the label 'almost identity verification' was given if, for example, the interpersonal identity standard was coded 'friendly' and the appraisal for the start of the lesson was coded 'understanding' (cf. Figure 2.2). This also applied if two out of three codes were almost matching.
- 3. <u>Partial identity verification</u>: The codes of the interpersonal identity standard and the evaluative appraisals differed in the Teacher Interpersonal Circle by a distance of two categories from each other. The label 'partial identity verification' was given if, for instance, the interpersonal identity standard was coded 'friendly' and the appraisal was coded

'accommodating' (cf. Figure 2.2). This also applied if two out of three codes were partially matching.

4. <u>No identity verification:</u> The codes differed in more than two categories. For example, when someone's appraisal of the start of the lesson was 'dissatisfied' and his or her interpersonal identity standard was 'friendly', this was labeled as no identity verification.

An example of the coding: physics teacher Matthew

Figure 2.4 shows an example of the result of two coded interviews with one participant, the 24-year old physics teacher, Matthew. The example shows the results for part of the two interviews: the interpersonal identity standard and the appraisal of the start of the lesson. In Figure 2.4 we see the Teacher Interpersonal Circle with two dimensions: the control dimension (vertically) and the affiliation dimension (horizontally). A combination of the scores on both dimensions results in a so-called sector score. The appraisal of each situation in interview fragments was labeled with one, two, or maximum three sector scores, depending on the number of different statements made by the teacher. Matthew appraises the start of the lesson in his video-stimulated interview: "I give the students some time to get ready and 'finetune' on me [accommodating]. I see them enter the classroom and I make some comments or chitchat with the students [friendly]. I cannot start immediately and stand still all the time so I choose to walk around and allow the students to settle down [accommodating]. After they have settled, I start the lesson [steering]. I am positive about this [benign-positive], I like this." His affective appraisal of the start of the lesson is benign-positive. Looking at Matthew's evaluative appraisal, the crossed marked sections show that the evaluative appraisals Matthew gives to the start of the lesson are accommodating, friendly, and steering. The dotted marked sections in Figure 2.4 depict Matthew's interpersonal identity standard, which he describes as "(...) I am strict, (...) but I am also easy to approach, and clear. When students have a problem, they can approach me." This statement illustrates the code of Matthew's interpersonal identity standard as enforcing, steering, and friendly.

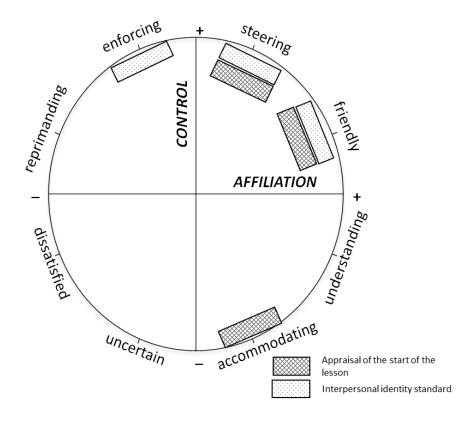


Figure 2.4 The interpersonal role identity of Matthew

When comparing Matthew's evaluative appraisal of the start of the lesson and his identity standard, we see that the evaluative appraisal of the start of the lesson (crossed marked sections) can be coded in the figure with three categories: 'steering', 'friendly' and 'accommodating.' The identity standard (the dotted marked sections) occurs in the figure at three categories: 'enforcing', 'steering', and 'friendly.' Two categories ('steering' and 'friendly') occur in the figure for both the identity standard and the appraisal of the start of the lesson. 'Enforcing' does not occur for the appraisal of the start of the lesson. 'Accommodating' does not occur for the interpersonal identity standard. Since two categories ('steering' and 'friendly') are identical for both the appraisal of the start of the lesson and the interpersonal identity standard, and one category ('steering') is positioned directly next to the other categories, this means that there is almost identity verification between the identity standard and the appraisal of the start of the lesson.

2.5 Results

2.5.1 Teachers' affective and evaluative appraisal of classroom situations

To answer the first sub question (How do teachers appraise specific classroom situations from an interpersonal perspective?), we studied the appraisal teachers gave to three classroom situations: (1) the start of the lesson; (2) reacting to student misbehavior; and (3) reacting to positive student behavior.

2.5.2 Affective appraisal

Table 2.4 shows the results of the affective and evaluative appraisal per classroom situation. The teachers' affective appraisal of all classroom situations taken together can relatively often be evaluated as benign-positive (33 out of 79 affective appraisals). This means many of the teachers' affective evaluations in a situation are positive: teachers evaluate the situation as positive for their wellbeing. For example, concerning the start of the lesson, Paul, a novice physics teacher commented: "I like this, this is the way I want it to be" (benignpositive affective appraisal). The other affective appraisals were coded as irrelevant (21 out of 79 affective appraisals) and stressful (25 out of 79 appraisals). When focusing on the stressful affective appraisal, we see that quite a number of teachers mentioned that they had difficulty with reacting to student misbehavior (16 out of 27 teachers) and the start of the lesson (9 out of 29 teachers). For example, concerning the start of the lesson teachers felt like they started too late and they did not know how to begin sooner or how to change the situation so that they felt comfortable and were able to teach. For example, Andrew, a novice chemistry teacher, stated: "I said to the students 'listen to me' but they continued talking; I don't feel comfortable in this situation and I want it to change but I do not know what to do" (stressful affective appraisal). Teachers with an irrelevant affective appraisal often referred to their routine (French teacher Angel: "this is just the way I always do it") or stated the importance as "keep it small," like social science teacher Ben stated when correcting students misbehavior: "I notice that girl is chewing gum, one of my rules this year is 'no chewing gum in the classroom' so she has to spit it out. She does not do this to bully me or something, it is no big deal. I just tell her that she has to put her gum to the

dustbin" (irrelevant affective appraisal). Ben did not feel offended; he just corrected the student's misbehavior.

Table 2.4Affective and evaluative appraisals per situation¹

	Start o	of the le	esson	n Student Positive misbehavior behavior			dent	Total		
Evaluative appraisal	Affective appraisal (number of teachers=27)			Affective appraisal (number of teachers=27)		Affective appraisal (number of teachers=25)			79	
	Benign- positive	Stressful	Irrelevant	Benign- positive	Stressful	Irrelevant	Benign- positive	Stressful	Irrelevant	
	n=92	n=9	n=9	n=2	n=16	n=9	n=22	n=0	n=3	
Steering	6	6	3	1	2	8	10	=	1	37
Friendly	4	3	4	-	2	1	10	-	0	24
Understanding	4	1	1	-	0	0	4	-	0	10
Accommodating	4	5	8	-	4	0	3	-	0	24
Uncertain	-	4	2	1	6	0	1	-	0	14
Dissatisfied	-	6	2	2	8	0	3	-	1	22
Reprimanding	1	5	2	1	11	8	1	-	1	30
Enforcing	2	1	1	0	2	0	1	-	-	7
Total	21	31	23	5	35	17	33	-	3	168

¹Teachers with missing affective appraisals in a specific situation were left out.

² Number of appraisals. For the evaluative appraisals, the total number of appraisals is higher than the total number of teachers since the teachers could give a maximum of three evaluative appraisals per situation.

2.5.3 Evaluative appraisal

As shown in Table 2.4 when focusing on the evaluative appraisals of the participants in the three classroom situations, statements that could be coded as 'steering' were mentioned the most often (37/168), followed by 'reprimanding' (30/168), 'accommodating' (24/168), and 'friendly' (24/168). In some cases, 'accommodating' and 'steering' were coded for the same situation by one participant. For instance, Thomas, a late-career arts teacher, described the start of his lesson: "...so I give them some time to settle [accommodating], afterwards I make contact with them and consequently start my lesson with some announcements" [steering]. In this statement, both codes can be applied. 'Enforcing' and 'understanding' were the least often coded appraisals when looking at all three classroom situations. This means that teachers' evaluations within the situation could be coded as 'steering' and 'reprimanding', but without being strict or enforcing. In addition, teachers mentioned that they did give students some freedom in the situation ('accommodating'). For most teachers, the start of the lesson could be coded as 'accommodating', 'steering', and 'friendly' (cf. Table 2.4). Participants often made statements like Matthew and Thomas, who mentioned, concerning the start of their lesson: "I give the students some time to settle down [accommodating] and get ready. And then I start talking to them and then after a short time the students listen." A similar appraisal could be found for the situation 'reacting to positive student behavior', which for most teachers could be coded as 'steering' and 'friendly.' Many participants stated that they complimented students to build the students' self-esteem, to acknowledge or confirm their good behavior, or to simply give them attention. By contrast, the situation 'reacting to disturbing student behavior' often resulted in the codes 'reprimanding', 'dissatisfied', and 'steering.' This shows that when the participants reacted to disturbing student behavior, they experienced them as taking control of the situation. In addition, the participants were dissatisfied with the situation in which the student misbehaved and felt a need to correct the student. However, there were also participants whose appraisal resulted in the codes 'uncertain', 'dissatisfied', and 'enforcing.' For instance, 24-year old physics teacher John discussed a misbehaving student: "At first, I hope the student will listen and sit behind his desk instead of walking around. When he doesn't listen, I hope he will go when I tell him

to leave the classroom, and finally I hope my school leader is strong enough to remove him from the classroom." The code 'understanding' did not occur when analyzing the appraisals of this situation. This indicates that teachers, when appraising the situation 'reacting to student misbehavior', did not mention anything that could be coded as understanding the misbehaving students.

A remarkable finding in the appraisal process is the elaborateness of the participants in talking about the specific classroom situations during the interview, which resulted in a higher number of codes that were assigned to a specific situation within an appraisal (cf. Table 2.4). The average number of codes that was assigned for an evaluative appraisal to the specific situation differed per situation. As can be seen in Table 2.4, the number of codes for reacting to positive student behavior (36 codes for appraisals of 25 participants -33 positive and 3 irrelevant) was much lower than the number for the start of the lesson (75 codes for appraisals of 27 participants - 21 benign-positive, 31 stressful, 23 irrelevant) and the number for the reaction to student misbehavior (57 codes appraisals of 27 participants - 5 benign-positive, 35 stressful, 17 irrelevant). This means that the appraisals of the start of the lesson and the reaction to student misbehavior per participant were more elaborate as well as diverse: participants' answers required several 'sectors/codes' to cover the full content of the answer. This can also be seen in the (uncoded) interview transcript as the participants tended to speak more and longer about the start of the lesson and the reaction to student misbehavior, compared to the reaction to positive student behavior. Reactions to positive student behavior needed less explanation according to the participants. The participants provided short answers and even reported in some cases that they did not feel a need to elaborate because this was all there was to say. Thomas stated: "I just do it, it is important for students to get confirmed." As well, for example, physics teacher Patrick commented: "She does something very well so I tell her that, I don't have deeper thoughts on this."

2.5.4 Interpersonal identity standards

The results for the first sub question concerning the interpersonal identity standards are shown in Table 2.5. Most of the participants' interpersonal identity standards consisted of two codes (i.e., two categories of the Teacher Interpersonal Circle, cf. Figure 2.2). The codes that were found most often in combination with each other were 'enforcing' and 'steering', and 'friendly' and 'understanding'. The interpersonal identity standards could often be labeled as 'friendly', 'steering', or 'understanding'. In the interpersonal identity standard of physics teacher Paul, all three of the mentioned codes occurred: "I think the students generally like me, I am almost friends with them and easy to approach for them [helping/friendly], but I am their teacher [steering]." All of the other eight codes occurred for one or more of the participants, even being 'dissatisfied', 'enforcing', or 'uncertain.' For instance, Andrew, a novice chemistry teacher, stated: "I do not have a good relationship with students; I do not know what to do about it and how to handle it [uncertain] but it should change because I do not like the students' behavior [dissatisfied]." This means that the interpersonal identity standard of teachers differed widely on both the dimensions of control and affiliation.

Table 2.5

Teachers' interpersonal identity standard

Identity standard of 29 teachers	Number ¹ of codes of the interpersonal									
	identity standards									
Steering	12									
Friendly	16									
Understanding	10									
Accommodating	4									
Uncertain	5									
Dissatisfied	5									
Reprimanding	0									
Enforcing	5									
Total	57									

¹ The number of codes of the interpersonal identity standard outnumbers the number of teachers, since interpersonal identity standards can consist of multiple (maximum three) codes.

2.5.5 Relation between appraisals and interpersonal identity standard

In the third sub question (How are teachers' appraisals of specific classroom situations related to their interpersonal identity standards?), the relation between the appraisal and the interpersonal identity standard was studied. Table 2.6 shows that for most of the participants, in at least one situation (almost) identity verification could be found. For six teachers, no identity verification could be found.

Table 2.6

Identity verification of teachers

Degree of identity verification of teachers	Number of participants
(almost) identity verification in all three situations	1
(almost) identity verification in two situations	10
(almost) identity verification in one situation	12
(almost) identity verification in none of the situations	6

Focusing on each of the specific classroom situations, Table 2.7 shows the identity verification per situation. From the analysis, it becomes clear that only a few participants had identity verification in two or three classroom situations; nine participants managed to have identity verification for the start of the lesson and only two participants for positive student behavior. No (exact) identity verification could be found for reacting to student misbehavior. On the other hand, Table 2.7 also shows that most participants did have partial identity verification, only six participants had no identity verification for the student disruptive behavior, and for five participants, no identity verification could be found for positive student behavior.

Table 2.7Number of participants and their identity verification for each situation

	Number of participar with	identity verification	almost identity verification	partial identity verification	no identity verification	Total number of participants ¹
Match between inter-	start of the lesson	9	12	7	0	28
personal identity standard	student misbehavior	0	11	12	6	29
and appraisal of	positive student behavior	2	11	9	5	27

¹ Some participants were - for various reasons - not able to appraise a situation. In that case the level of identity verification for a particular situation could not be defined. Therefore the total number of participants is different per situation.

2.6 Discussion and conclusion

In this study, we set out to explore teachers' interpersonal role identity by investigating their interpersonal identity standards and appraisals of three specific classroom situations (start of the lesson, reacting to student misbehavior, reacting to positive student behavior). Subsequently, we looked at the relation between teachers' appraisals of the three specific classroom situations and their identity standards. The results showed that teachers' appraisals and identity standards were quite diverse, but were often related to each other.

The results of this study showed a variety of codes for the interpersonal identity standard. Most interpersonal identity standards were, as expected, labeled 'friendly' and 'steering.' These codes refer to the upper right part of the Teacher Interpersonal Circle, which refers to a teacher-student relationship with a high level of control and a medium or high level of affiliation. From previous research, it is known that this is the best teacher-

student relationship in terms of student outcomes, student motivation, and teachers' self-efficacy and work engagement, and that this is the ideal teacher-student relationship as seen by both teachers and students (Wubbels et al., 2006). The other codes of the Teacher Interpersonal Circle also occurred, except 'reprimanding.'

Concerning the affective appraisals, we expected to see benign-positive appraisals for the positive student behavior and more stressful appraisals for the start of the lesson and for the reaction to student misbehavior. Surprisingly, there were teachers whose appraisals for the positive student behavior could not be coded as benign-positive, but were coded as irrelevant. Some teachers were not so enthusiastic to compliment a student with positive behavior. In addition, teachers were less elaborate in their appraisals about this situation. However, this can also be due to the fact that it was the third fragment the participants were asked to comment on (after the start of the lesson and the reaction to student misbehavior).

For the evaluative appraisal, 'steering', 'reprimanding', 'friendly', and 'accommodating' were the most often occurring codes. Not surprisingly, in all classroom situations, 'steering' was one of the most popular codes. Teachers want to be the person in the classroom who decides what happens. The relation between the affective appraisal and the evaluative appraisal is remarkable. If a teacher had a benign-positive affective appraisal, the teacher's evaluative appraisal was most often steering, friendly, or understanding. This was true for both the start of the lesson and the positive student behavior, as can be seen in Table 2.4. Similarly, if a teacher had a stressful affective appraisal, one would expect the majority of the evaluative appraisals to be coded as uncertain, dissatisfied, reprimanding, and enforcing. As Table 2.4 shows, this is the case for the appraisal of student misbehavior, but not the case for the start of the lesson. This might indicate that teachers appraise certain classroom situations (i.e., the start of the lesson or reacting to positive student behavior) different than other classroom situations (i.e., reacting to student misbehavior) and that these classroom situations may have different significance for their identity standards.

The interpersonal identity verification analysis in this research has shown that for most participants, a 'match' could be found between their interpersonal identity standard and the appraisal for one or more classroom situations. However, this may be the result of the fact that teachers' interpersonal identity standards in this study were defined as the

perceived interpersonal frame of reference, without including the ideal interpersonal frame of reference as is done by Burke and Stets (2009). If the ideal interpersonal frame of reference was included, the differences between standards and appraisals might have been larger. Also, the expected variety of interpersonal identity standards would possibly have been smaller: it is unlikely that someone has an ideal teacher-student relationship which entails being uncertain, dissatisfied and reprimanding (e.g. Wubbels et al., 2006). This study researched the appraisal and the interpersonal identity standard and whether there was a match or a mismatch between the appraisal and the interpersonal identity standard, but it did not investigate the effect of the match or mismatch. Is it harmful for their teaching or themselves to continue like this? Does it change or stay stable? What does it mean to have a (mis)match in specific classroom situations for teachers in the long run?

For some participants, this 'match' between a situation and an interpersonal identity standard means that these teachers will have benign-positive or irrelevant appraisals and good teacher-student relationships, i.e., the codes in the upper right quadrant of the Teacher Interpersonal Circle. Previous research has shown that these kinds of appraisals and teacher-student relationships will lead to high student outcomes and high job satisfaction (Lazarus & Folkman, 1984; Wubbels et al., 2006). These teachers might not feel a tension between their identity standard and the situation and might possibly continue teaching the way they were used to. An impetus for the interpersonal professional development of these teachers is probably lacking. They might not improve themselves interpersonally during the years, since for learning to take place, a tension, discomfort or discrepancy between the actual situation and the ideals might be needed (Pillen et al., 2013b; Meijer 2011).

For other participants, however, the match might be different. These teachers had, for instance, both an interpersonal identity standard which is labeled as 'uncertain' and 'reprimanding', and the appraisal of the start of the lesson being labeled in the same way. These teachers might not feel comfortable with the match and, if they do not change either their interpersonal identity standard or their appraisal, they may experience dissatisfaction with their work.

2.7 Limitations, implications, and opportunities for further research

One of the limitations of this study is that although we have now explored the important elements (i.e., appraisal and interpersonal identity standard) of the interpersonal role identity and we can see that identity verification can be found in some classroom situations, the specific influence of the appraisal on the interpersonal identity standard, and vice versa, remains unclear. Also, this study focuses on three specific classroom situations (start of the lesson, reacting to student misbehavior, reacting to positive student behavior) and does not take into account other classroom situations. Different or more classroom situations might lead to a more complete overview of the appraisals of a teacher and this would also offer more opportunities to establish identity verification. The stability of identity verification within and across the career is one of the challenges for future research. To investigate the interpersonal role identity on a longitudinal level and to combine it with other variables such as student outcome and job satisfaction would give insight in the consequences and the stability of a match/mismatch.

Our framework and findings have several implications for practice. First, the framework can be used in teacher education to elicit the appraisal processes of specific classroom situations and interpersonal identity standards of student teachers. This way, student teachers will get a better grip on their relationship with students, both in general and specific situations. In addition, teacher educators can monitor the student teacher's (lack of) identity verification and help the student teacher to develop his or her teacher interpersonal role identity.

Chapter 2 Teachers'	Interpersonal	Role identity:	Identity	standard	and appraisal	
---------------------	---------------	----------------	----------	----------	---------------	--

Chapter 3

A longitudinal study of teachers' interpersonal role identity³

³ This chapter has been submitted for publication as: van der Want, A. C., den Brok, P., Beijaard, D., Brekelmans, M., Claessens, L. C. A., & Pennings, H. J. M. (submitted). *A longitudinal study of teachers' interpersonal role identity*.

Abstract

This chapter reports on a longitudinal study of teachers' appraisals of specific situations in their classrooms and how these appraisals match with their interpersonal identity standards. Semi-structured and video-stimulated interviews were conducted with 29 teachers in 2011 and 2013. Over time irrelevant affective appraisals increased and a trend towards more affiliation and more control was found both for the evaluative appraisals as for the interpersonal identity standards. All in all, many teachers changed and their identity verification increased. The concept of role identities offers a promising theoretical framework for future research on teacher identity and teacher-student relationships and at the same time be a practical tool for supporting teachers' identity development.

3.1 Introduction

During the last two decades, an increasing number of studies have been done on teachers' professional identity (e.g., Beijaard et al., 2004; Beauchamp & Thomas, 2009). The teacher-student relationship was found to play an important role in these studies. For example, Hargreaves (1980) and Sikes, Measor and Woods (1985), stated that the teacher-student relationship was one of the main features of teachers' professional identity. O'Connor (2008) furthermore showed that a positive professional relationship with students is seen by teachers as 'being an integral part of their professional identity' (p. 121). Some studies have shown that student and novice teachers face a variety of identity related tensions and problems that pertain to classroom management and developing a good relationship with students (e.g., Volkmann & Anderson, 1998; Pillen et al., 2013a). Various studies link these teacher-student tensions and problems with teacher attrition and burnout (Ingersoll & Smith, 2003; Macdonald, 1999; Veenman, 1984).

Following Burke and Stets (2009), we perceive a teacher as a professional having several roles while teaching, varying from being a subject matter expert to an interpersonal expert who interacts and builds a relationship with students. The interpersonal role identity seems to be of crucial importance for teachers and might be conditional for a teacher to enact other roles in the classroom, such as the role of being a subject matter expert or a didactical expert. Van der Want et al. (2015) described teachers' interpersonal role identity as a system in which two main aspects influence each other: the teachers' appraisal of classroom situations and their interpersonal identity standard. The concept of appraisal can be understood as the process of evaluating a situation, with respect to its importance and effect on a teacher's wellbeing (Admiraal, 1994; Admiraal et al., 2000; Arnold, 1960; Lazarus & Folkman, 1984). Lazarus and Folkman (1984) argue that appraisal processes take place continuously: every situation is evaluated by individuals (Am I in trouble? Is this harmful for myself? What should I do now?). A distinction is often made between an affective appraisal, which focusses on the first feeling in a situation, and an evaluative appraisal, during which the situation is reflected upon and evaluated (Admiraal, 1994; Admiraal et al., 2000; Lazarus & Folkman, 1984). The identity standard is an individual's frame of reference that consists of the set of self-relevant meanings or ideas that define the character of the role identity (Burke & Stets, 2009). In this study, the *interpersonal* identity standard is defined as the *interpersonal* frame of reference of an individual teacher, which consists of the set of self-relevant meanings or ideas concerning the teacher-student relationship.

In a situation in which the interpersonal identity standard is confirmed during the appraisal, interpersonal role identity verification occurs. Interpersonal role identity verification means that appraisals by teachers in the situation are consistent with their interpersonal identity standard. A lack of identity verification occurs when these appraisals of the person in the situation do not match with the interpersonal identity standard. Previous research showed that not all teachers have an interpersonal identity standard that matched (to some degree) their appraisals of specific classroom situations (van der Want et al., 2015; see also Chapter 2). Drawing upon previous studies in which the teacherstudent relationship was related to student outcomes and teacher wellbeing (Wubbels et al., 2006) we distinguished two kinds of interpersonal identity standards: healthy and unhealthy interpersonal identity standards (see Figure 3.1). Healthy interpersonal identity standards (e.g., being steering, friendly, understanding) are positively related to teachers' wellbeing and student outcomes, unhealthy interpersonal identity standards (e.g., being uncertain, dissatisfied, reprimanding) are negatively related (Wubbels et al., 2006). The teachers with healthy interpersonal identity standards were further divided into two groups: those with identity verification ('healthy matchers') and those without ('healthy mismatchers'). The teachers with unhealthy interpersonal identity standards ('unhealthy (mis)matchers') were not divided into two groups because of the limited number of teachers with an unhealthy interpersonal identity standard in the sample. By combining the healthy/unhealthy interpersonal identity standards with (the lack of) identity verification, three groups of teachers were formed: (1) healthy matchers, (2) healthy mismatchers, and (3) unhealthy (mis)matchers.

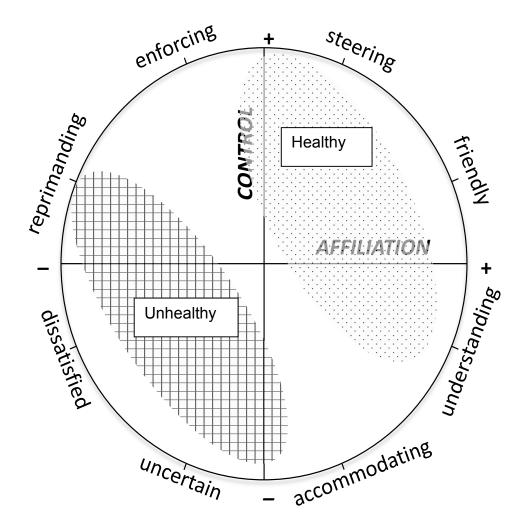


Figure 3.1. Teacher Interpersonal Circle depicting healthy and unhealthy areas of interpersonal identity standards (cf. Wubbels et al., 2006)

Although our previous research (Chapter 2) has underlined the importance of interpersonal identity verification, longitudinal research on teachers' interpersonal role identity can hardly be found. Can healthy mismatchers or unhealthy (mis)matchers change over time and become (more) healthy matchers? Do healthy matchers stay healthy matchers? How do unhealthy matchers survive during the years? Should student teachers who are considered unhealthy matchers or healthy mismatchers be advised not to enter the teacher profession or do they need additional support on this topic? In this study, we will explore questions related to these issues in a longitudinal study of teachers concerning their

interpersonal relationship with students, henceforth referred to as teachers' interpersonal role identity. For pragmatic reasons a timeframe of two years was chosen. The study was shaped by the following central research question: *How does teachers' interpersonal role identity change over a period of two years?*

This study aims to longitudinally explore teachers' interpersonal role identity by focusing on teachers' appraisals of classroom situations and the interpersonal identity verification with their interpersonal identity standards. Teacher educators can use the concept and operationalization of teachers' interpersonal role identity to support teachers' interpersonal role identity and to help them to become healthy matchers, which might reduce teachers' stress experiences (Burke & Stets, 2009), increase their job satisfaction and their wellbeing (Veldman, van Tartwijk, Brekelmans, & Wubbels, 2013).

3.2 Theoretical framework

In this section the analytical framework of teacher-student relationships used in this study will be described first, followed by a description of the key constructs 'appraisal of classroom situations', 'interpersonal identity standard' and 'identity verification'.

3.2.1 Teacher-student relationship

The teacher-student relationship is studied using the Teacher Interpersonal Circle, sometimes referred to as the IPC-T (Wubbels et al., 2006; Wubbels, Brekelmans, den Brok, Levy, Mainhard, 2012). The Teacher Interpersonal Circle consists of two dimensions: (1) The control dimension, which describes the degree of control the teacher has on students (as experienced by the students), and (2) the affiliation dimension, which describes the degree of cooperation or opposition between the teacher and the students. The two dimensions are shown in Figure 3.1 and can be subdivided into eight categories for characterizing interpersonal relationships between teachers and students, depending on different combinations of the level of control and affiliation: (1) steering, (2) friendly, (3) understanding, (4) accommodating, (5) uncertain, (6) dissatisfied, (7) reprimanding, and (8) enforcing (Wubbels et al., 2006). As said, a distinction can be made between healthy and unhealthy interpersonal identity standards. Healthy could be defined as a high level of

control combined with a high level of affiliation in terms of the Teacher Interpersonal Circle, unhealthy as a low level of control combined with a low level of affiliation. Healthy interpersonal identity standards (e.g., being steering, friendly, understanding) are positively related to teachers' wellbeing and student outcomes, unhealthy interpersonal identity standards (e.g., being uncertain, dissatisfied, reprimanding) are negatively related (Wubbels et al., 2006; Figure 3.1).

3.2.2 The appraisal of interpersonal classroom situations

The concept of appraisal, the process of evaluating a situation with respect to its importance for a teacher's wellbeing, consists of two elements: the affective and the evaluative appraisal (Arnold, 1960; Lazarus & Folkman, 1984). The affective appraisal is summarized by the question, "am I in trouble or being benefited, now or in the future and in what way?" The affective appraisal is often expressed in an emotion or feeling and can be divided into three categories: irrelevant, benign-positive, and stressful (Lazarus & Folkman, 1984). When a situation is appraised as *irrelevant*, this means that teachers experience no implications for their wellbeing/teaching and the situation impinges on no value, need, or commitment or other part of their interpersonal identity standard. *Benign-positive* appraisals can be found in classroom situations that teachers experience as enhancing or preserving their wellbeing. When an event is appraised as *stressful*, a teacher experiences it as being harmful or threatening for him/herself.

The evaluative appraisal can be summarized by the question, "what can and might be done about it?" (Lazarus & Folkman, 1984). The evaluative appraisal is a complex process that takes the following factors into account: (1) which options are available to deal with the situation; (2) the chance that a given option will accomplish what it is supposed to (outcome expectation); and (3) the chance that one can apply a particular strategy or set of strategies effectively (efficacy expectation).

Three classroom situations were used to elicit appraisals in this study. These classroom situations were: the start of the lesson, reacting to student misbehavior, and reacting to positive student behavior. In previous research, all three classroom situations

have been found to be important with respect to the teacher-student interpersonal relationship (Admiraal, 1994; Admiraal et al., 1996; Wubbels et al., 2006).

In our own previous research on appraisals of these classroom situations with the same participants as in this study, affective and evaluative appraisals of teachers were investigated by video-taping a lesson of the teacher which was followed by a video-stimulated interview. During this video-stimulated interview, the participants were asked to watch and appraise the three abovementioned classroom situations of the video-taped lesson. The data of the affective appraisal were coded with the three categories (irrelevant, benign-positive, and stressful). For each affective appraisal, one category was assigned as a code. The data concerning the evaluative appraisal were coded using the eight categories of the Teacher Interpersonal Circle (Wubbels et al., 2006; Figure 3.1). Since coding of teachers' appraisals needed multiple categories, we decided to code up to a maximum of three categories as codes for the evaluative appraisal. The appraisals were coded based on the categories that were mentioned first and with the most emphasis by the participant.

The results showed that teachers most often reported their affective appraisals to be benign-positive (33 out of 79 affective appraisals). Stressful affective appraisals were often found for reacting to student misbehavior and the start of the lesson. Irrelevant appraisals referred often to teachers with a certain routine or experience with the situation. Concerning the evaluative appraisal, teachers' responses could be positioned at different places in the Teacher Interpersonal Circle (Figure 3.1): appraisals related to the categories 'steering', 'reprimanding', and 'accommodating' occurred the most often. However, appraisals also related to categories as uncertain, dissatisfied and enforcing were found (van der Want et al., 2015). In the present study, the results about the affective and evaluative appraisals of classroom situations are presented over a period of two years.

3.2.3 Interpersonal identity standard

The identity standard, the frame of reference, 'defines the character [nature] of the role identity according to the individual' (Burke & Stets, 2009, p.32, p.63). Teachers' interpersonal identity standards represent not only one's current but also one's ideal frame of reference concerning the teacher-student relationship in the classroom (Burke & Stets,

2009, p.3). Our previous research on interpersonal identity standards showed that most teachers from the same sample as in this study (n=29 teachers) reported an interpersonal identity standard that could be coded using the Teacher Interpersonal Circle as 'steering' and/or 'being friendly'. For example, one of our participants described his interpersonal identity standard as 'formal in essence, but in a friendly and reasonable informal touch' ('steering' and 'friendly'). A variety of other interpersonal identity standards, such as 'enforcing' or 'uncertain', was found (van der Want et al., 2015). Similar to the coding procedure of the evaluative appraisal, up to three categories were assigned as codes for the interpersonal identity standard. In this study, two kinds of interpersonal identity standards were distinguished: healthy and unhealthy interpersonal identity standards for teachers' wellbeing and student outcomes based on previous research on interpersonal (i.e., teacher-student) relationships (Figure 3.1).

3.2.4 Identity verification

Identity verification is a continuous process in which teachers compare their interpersonal identity standard with their appraisal of specific classroom situations (Burke & Stets, 2009). If the interpersonal identity standard does not match with the appraisal, a so-called mismatch, there is a lack of identity verification and '... people become upset or distressed in varying degrees' (Burke & Stets, 2009, p. 208). According to Burke and Stets (2009), people will try to change this mismatch of appraisals and identity standard into a matching couple. This can be done by either changing the appraisal of a classroom situation or by changing the identity standard.

3.2.5 Research questions

This study aimed to longitudinally explore teachers' interpersonal role identity by focusing on teachers' appraisals of classroom situations and how these are related to their interpersonal identity standards. The study was shaped by the central research question: How does teachers' interpersonal role identity change over a period of two years?

Based on our theoretical framework, the main question can be subdivided into the following more specific questions:

- 1. How do teachers' appraisals of specific classroom situations change over a period of two years?
- 2. How do teachers' interpersonal identity standards change over a period of two years?
- 3. How does identity verification change over a period of two years?
- 4. Can differences be found on the answers to the questions above for teachers with healthy and unhealthy standards?

3.3 Method

3.3.1 Participants

In our previous study (van der Want et al., 2015), teachers' interpersonal role identity was empirically explored using a sample of 29 teachers in secondary education. To select the participants, we invited teachers through large internet for by using a network of schools from teacher training institutes and by advertising in teacher magazines/journals. In total, 180 teachers (from 60 schools) responded to our calls. From these 180 teachers, a stratified sample of 29 secondary school teachers was selected with different classroom climates (a detailed description of the selection procedure can be found in van der Want et al., 2015).

In the present study we thus invited the same 29 teachers to participate. Of these 29 teachers whom we had interviewed in 2011, 24 teachers were still working in secondary education (two years later in 2013) and were willing to participate in this study.

Using the Teacher Interpersonal Circle (Figure 3.1) the interpersonal identity standards of the participants in this study were divided based on the data of 2011 into 'healthy' and 'unhealthy'. After that, the participants with a healthy interpersonal identity standard were divided into two groups based on the data of 2011: one group consisted of participants with interpersonal identity verification or 'a match' while the other group consisted of the participants with no interpersonal identity verification, 'a mismatch'. If a participant had identity verification in 2 or 3 situations, this was considered 'a match', in case where there was identity verification in no or one situation, then this was considered a mismatch. In the end, this resulted in three groups of participants: (A) Healthy matchers, (B) Healthy mismatchers, (C) Unhealthy (mis)matchers (see Table 3.1).

Table 3.1

Overview of the Participants in 2013 (N=24)

				Years of		
	Name ²	Gender	Age	teaching	Subject	Interpersonal identity
	(Alias)			experience		standard
						in 2011
Group A Healthy	Matthew	Male	24	1	Physics	Steering, Friendly, Enforcing
matcher	Lugy	Female	35	12	Dutch	Steering, Friendly
(n=8)	Lucy Billy	Male	35	11	Arts	· .
	БШу	maie	33	11	Arts	Friendly, Understanding, Accommodating
	Paul	Male	34	1	Physics	Friendly
	Ben	Male	29	2	Social	Steering, Understanding,
					Studies	Enforcing
	Chris- tine	Female	42	21	Physics	Friendly, Accommodating
	Angel	Female	53	31	Latin	Steering
	Philip	Male	56	28	Geography	Friendly, Enforcing
	1				0 1 7	<i>;</i> ,
Group B	John	Male	25	1	Physics	Steering, Understanding
Healthy	Patrick	Male	43	1	Physics	Friendly, Understanding
mismatcher	Michael	Male	34	11	History	Friendly, Understanding
(n=13)	Joyce	Female	47	9	French	Steering, Enforcing
	Dorothy	Female	42	9	Biology	Friendly, Dissatisfied
	Louise	Female	39	1	Physics	Friendly
	Jane	Female	28	1	Chemistry	Steering, Dissatisfied
	Peter	Male	28	2	Biology	Friendly
	Char-	Female	50	11	Dutch	Steering, Friendly
	lotte					
	David	Male	47	11	Physics	Understanding,
						Accommodating
	Rosy	Female	55	34	Economics	Steering, Uncertain
	Luke	Male	50	25	Physics	Friendly
	Adrian	Male	54	26	Geography	Steering, Friendly
Group C	Daniel	Male	46	8	Economics	Uncertain, Dissatisfied
Unhealthy	Andrew	Male	50	1	Chemistry	Uncertain, Dissatisfied
(mis)- matcher (n=3)	Jane	Female	56	34	Arts	Enforcing

² All names are fictitious for reasons of anonymity

3.3.2 Data collection

In order to obtain data about teachers' interpersonal role identity, a video-stimulated interview (concerning teachers' appraisals of classroom situations) and a semi-structured interview (concerning teachers' interpersonal identity standard) were conducted per teacher on the same day in 2011. The interviews were audio-taped, lasted approximately 30 minutes and took place at the school of the teacher (with te consent of both school management and participant). Prior to the interviews, though on the same day, one of the teacher's lessons was video-taped and observed by the researcher (students were informed beforehand by the teachers and were given the opportunity not to be visible on camera). The video-taped lesson was used during the video-stimulated interview in which the teacher was asked to watch and appraise his/her classroom situations. All participants stated that the video-taped lesson was representative for their lessons in general considering their teacher-student relationship. In 2013 the same procedure was followed for data collection.

Appraisal

The video-stimulated semi-structured interview was held to study teachers' appraisals of the three specific classroom situations (the start of the lesson, reacting to student misbehavior, reacting to positive student behavior). Each teacher was asked to reflect on the fragments by answering three questions. The first question dealt with the description of the situation, followed by questions regarding the affective and evaluative appraisal.

Identity standard

The semi-structured interview was conducted to gain insight into teachers' interpersonal identity standard. The participants were asked to describe their relationship with students in their classroom in general. The coding procedure for the data was based on the Teacher Interpersonal Circle, containing the categories of steering, friendly, understanding, accommodating, uncertain, dissatisfied, reprimanding, and enforcing (Figure 3.1; Wubbels et al., 2006).

3.4 Analysis

3.4.1 Appraisals

The affective appraisals were analyzed with the three categories of Lazarus and Folkman (1984): (1) benign-positive, (2) stressful, and (3) irrelevant. To analyze the possible changes in teacher affective appraisals, a matrix was constructed which included for each classroom situation the affective appraisals of 2011 and 2013. By comparing the affective appraisals of 2011 and 2013 the change of the codes per situation between 2011 and 2013 was explored and added to the matrix to create an overview of these data.

The evaluative appraisals were coded using the categories of the Teacher Interpersonal Circle (steering, friendly, understanding, accommodating, uncertain, dissatisfied, reprimanding, and enforcing). Since teachers described their evaluative appraisal in terms of their behavior, the Teacher Interpersonal Circle offers a useful instrument for our analysis. Interrater reliability was found sufficient for the analysis and appraisal codes (84% agreement for the affective appraisal, 94% for the evaluative appraisal). After discussion of the fragments on which no initial agreement was found, agreement on all the coded fragments was found (100%).

In order to analyze whether teachers' evaluative appraisal of classroom situations had changed, the number of codes for the data of 2011 and 2013 were compared for all the participants as a group and per participant. Based on the initial results, three categories of change were defined. The first category was 'complete change', which indicated that none of the codes of 2011 were present in the 2013 coding. The second category was 'partial change', which indicated that one or more of the codes of 2011 were present in the 2013 coding. The third and last category was 'no change', which indicated that the codes of 2011 were similar to the codes of 2013.

To analyze the direction of the change (if applicable), i.e., what the change entailed, the two dimensions (control and affiliation) of the Teacher Interpersonal Circle were used to describe the change. For instance, if a participant had an interpersonal identity standard in 2011 which was coded as 'uncertain' and in 2013 as 'friendly' then the level of control increased and the level of affiliation increased as well.

The interpersonal identity standards were analyzed according to the same procedure and with the same codes and categories as the evaluative appraisals. Interrater reliability was found sufficient for the analysis of the interpersonal identity standard (83% agreement). After discussion of the fragments on which no initial agreement was found, agreement on all the coded fragments was found (100%).

3.4.2 Identity verification

In order to determine per participant whether interpersonal identity verification occurred, we compared the codes of the interpersonal identity standards and the interpersonal appraisals. If exactly the same codes or codes positioned next to each other in the Teacher Interpersonal Circle were assigned to a particular teacher, this was considered as 'a match' (interpersonal identity verification). If the codes from the interpersonal identity standard and the interpersonal appraisal differed by a distance of two or more categories from each other in the Teacher Interpersonal Circle, then this was considered as a 'mismatch' resulting in no interpersonal identity verification. This coding procedure was based upon the theory of circumplex models which states that codes positioned directly next to each other, have a high positive correlation, whereas codes that differ two or more categories (over 90 degrees in the circle) do not correlate positively or correlate negatively (Fabrigar, Visser, & Browne; 1997). The above-mentioned procedure was followed for all the interviews of 2011 and the interviews of 2013. A matrix was constructed in order to create an overview of the data.

To analyze the change of identity verification the number of situations in which identity verification occurred in 2011 and 2013 were compared per participant. The distinction between identity verification or no identity verification was made based on the following: participants were coded as having identity verification in a specific situation if their appraisal of an classroom situation either matched exactly with the codes of their interpersonal identity standard or if they almost matched, that is if the codes were positioned directly next to each other in the categories of the Teacher Interpersonal Circle. All other combinations were coded as 'no identity verification'. In order to be coded as a 'matcher', at least two situations had to be coded as 'identity verification' or 'almost identity verification'.

Next, an analysis was made per situation to see whether the number of participants that had identity verification, changed between 2011 and 2013. Based on their interpersonal identity standard and their identity verification (to a certain degree), all participants were positioned in one of the three groups (healthy matcher, healthy mismatcher, unhealthy (mis)matcher) in 2011 and in 2013. The results of the participants in 2011 and 2013 were compared. Change was reported if participants changed from healthy to unhealthy (or vice versa), from match to mismatch (or vice versa) or a combination of both. An example of the data analysis of a participant can be found in Table 3.3.

Table 3.3

Example of the analysis of change between 2011 and 2013 for one participant

Participant: John,	a 25 year old beginning p	ohysics teacher
Situation	Construct	Change between 2011 and 2013
-	Interpersonal Identity standard	Slightly more affiliation and less influence
Start of the lesson	Affective appraisal Evaluative appraisal	More positive More affiliation and more influence
Reacting to student misbehavior	Affective appraisal	More irrelevant
	Evaluative appraisal	More affiliation
Reacting to positive student behavior	Affective appraisal	No change (positive)
Deliavioi	Evaluative appraisal	More affiliation
-	Identity verification	From healthy mismatcher (no identity verification) to healthy matcher (identity verification)

3.5 Results

3.5.1 Change in teachers' appraisals of specific interpersonal classroom situations

Teachers' appraisals - both the affective and the evaluative appraisal - changed over a period of two years. For *the affective appraisal*, a clear trend of change could be found which can be described as 'towards irrelevant affective appraisal'. The total number of situations in which the affective appraisal was coded as 'irrelevant' increased from 16 situations of participants in 2011 to 48 situations of participants in 2013 (Table 3.4). This means that some participants appraised situations in 2011 as either benign-positive or stressful, but in 2013 as irrelevant. For instance, physics teacher John appraised his reaction to student misbehavior in 2011 as stressful. He stated: 'I do not know what to do, I tell him to sit down and be quiet, but he does not listen'. In 2013 John appraised his reaction to student misbehavior as irrelevant; he said: 'I told them to work individually and one of the students, Tim, starts talking, so I directly tell him to work individually and without talking to his neighbors and that's just it. He is the kind of student that usually needs a bit more and clearer explanation, so I give that to him.'

Table 3.4

Change in affective appraisals 2011 and 2013

Affective appraisals									
	Benign-Positive Stressful Irrelevant								
Classroom situations	2011	2013	2011	2013	2011	2013			
Start of the lesson	7	3	8	2	7	19			
Student misbehavior	2	0	14	5	7	19			
Positive student behavior	20	11	0	1	2	10			
Total	29	14	22	8	16	48			

When looking at *the evaluative appraisal* of all three situations, an increase in the code 'friendly' and a decrease of the codes 'uncertain', 'dissatisfied', 'reprimanding' and 'enforcing' can be found (Table 3.4). The change in teachers' evaluative appraisals can be best described as a trend towards *more affiliation and more control* (Table 3.5). Table 3.5 shows teachers' appraisals of 2011 and 2013.

Table 3.5

Teachers' evaluative appraisals in 2011 and 2013

	Start o lesson			nt havior	Positive student behavior			l codes ill three
Codes	2011	2013	2011	2013	2011	2013	2011	2013
Steering	13	14	9	14	8	3	30	31
Friendly	8	14	3	5	8	19	19	38
Understanding	4	4	0	1	3	2	7	7
Accommodating	13	23	3	2	3	1	19	26
Uncertain	5	2	6	0	1	1	13	3
Dissatisfied	7	3	8	6	5	3	20	12
Reprimanding	8	0	18	23	2	2	28	25
Enforcing	4	0	2	0	1	1	7	1
Total	62	60	49	51	31	32	143	143

¹n=number of teachers. Some teachers were not able to appraise one of the situations, therefore the number of teachers differs per situation.

3.5.2 Change in teachers' interpersonal identity standards

In general, teachers' interpersonal identity standards changed towards a more healthy interpersonal identity standard, with a high(er) level affiliation (Table 3.6). An overview for each respondent concerning their change in interpersonal identity standard, can be found in Table 3.7. As can be seen in Table 3.7, for six respondents there was no change in their interpersonal identity standard, for 13 respondents some elements in their interpersonal identity standards were stable and for 5 respondents their interpersonal identity standard completely changed in terms of the Teacher Interpersonal Circle.

Concerning the level of control, an increase was found for six respondents and a decrease for nine respondents. The level of affiliation, for 13 respondents an increase was found and for only two respondents a decrease. The number of healthy interpersonal identity standards increased (from 21 to 22) and the number of unhealthy interpersonal identity standards decreased (from three to two) between 2011 and 2013.

The number of codes for steering, friendly, understanding and accommodating increased; the sum of the codes for these four categories was 35 in 2011 and 44 in 2013. These codes can be considered 'healthy codes'. The other four categories (uncertain, dissatisfied, reprimanding, enforcing) decreased slightly from 12 codes in 2011 to 9 codes in 2013. These codes can be considered 'unhealthy codes' (Figure 3.1).

Table 3.6Teachers' interpersonal identity standards in 2011 and 2013

Interpersonal identity standard							
	Number ¹ of codes of the interpersonal identity standards						
Codes	2011 (N=24)	2013 (N=24)					
Steering	11	10					
Friendly	14	18					
Understanding	8	10					
Accommodating	2	6					
Uncertain	3	2					
Dissatisfied	4	3					
Reprimanding	0	1					
Enforcing	5	3					
Total	47	53					

¹The number of codes of the interpersonal identity standard outnumbers the number of teachers, since interpersonal identity standards can consist of multiple (maximum three) codes.

Table 3.7 interpersonal identity standards and healthy match/mismatch in 2011 and 2013 per respondent

	Name ²	Interpersonal	Interpersonal	Change in	(Un)Healthy
	(Alias)	identity standard in 2011	identity standard in 2013	interpersonal identity standard	(mis-) matcher in 2013
Group A Healthy matcher	Matthew	Steering Friendly Enforcing	Steering Friendly Enforcing	No change	Healthy matcher
in 2011 (n=8)	Lucy	Steering Friendly	Friendly	*less control, more affiliation	Healthy matcher
	Billy	Friendly Understanding Accommodating	Friendly Understanding Accommodating	No change	Healthy mismatcher
	Paul	Friendly	Steering Enforcing	more control, less affiliation	Healthy matcher
	Ben	Steering Understanding Enforcing	Friendly Understanding	* less control, more affiliation	Healthy matcher
	Christine	Friendly Accommodating	Friendly Understanding	* more control, more affiliation	Healthy matcher
	Angel	Steering	Friendly	less control, more affiliation	Healthy matcher
	Philip	Friendly Enforcing	Steering Friendly Enforcing	* more affiliation	Healthy matcher
Group B Healthy	John	Steering Understanding	Steering, Understanding	No change	Healthy matcher
mis- matcher	Patrick	Friendly Understanding	Friendly Understanding	No change	Healthy matcher
in 2011 (n=13)	Michael	Friendly Understanding	Steering Friendly	* more control,	Healthy mismatcher
	Joyce	Steering Enforcing	Steering Friendly	*more affiliation	Healthy matcher
	Dorothy	Friendly Dissatisfied	Steering Friendly Understanding	* more affiliation	Healthy mismatcher
	Louise	Friendly	Understanding Accommodating	less control, more affiliation	Healthy mismatcher
	Jane	Steering Dissatisfied	Friendly Understanding Dissatisfied	* less control, more affiliation	Healthy matcher
	Peter	Friendly	Friendly	No change	Healthy matcher
	Char- lotte	Steering Friendly	Steering Friendly Accommodating	*less control, more affiliation	Healthy matcher
	David	Understanding Accommodating	Steering Friendly	more control	Healthy matcher
	Rosy	Steering Uncertain	Steering	* more control, more affiliation'	Healthy mismatcher

Table 3.7 continued	Name ² (Alias)	Interpersonal identity standard in 2011	Interpersonal identity standard in 2013	Change in interpersonal identity standard	(Un)Healthy (mis-) matcher in 2013
Group B Healthy mis-matcher	Luke	Friendly	Friendly Understanding Accommodating	* less control, more affiliation	Healthy mismatcher
in 2011 (n=13)	Adrian	Steering Friendly	Friendly Understanding Accommodating	* less control, more affiliation	Healthy matcher
	Daniel	Uncertain, Dissatisfied	Uncertain Dissatisfied	No change	Unhealthy matcher
Group C Unhealthy (mis)-	Andrew	Uncertain, Dissatisfied	Uncertain Dissatisfied Reprimanding	* more control, less affiliation	Unhealthy mismatcher
matcher in 2011	Jane	Enforcing	Steering Understanding	less control, more affiliation	Healthy matcher
(n=3)	Jane	Enforcing	Steering Understanding	less control, more affiliation	Healthy matcher

3.5.3 Change in teachers' identity verification

Overall, teachers' identity verification increased between 2011 and 2013 (Tables 3.8, 3.9). The number of participants with identity verification in all three situations rose from one (2011) to five participants (2013). Next to that the number of participants with no identity verification decreased from 5 participants (2011) to 2 participants (2013) (Table 3.8). In addition, for 17 out of 24 teachers (almost) identity verification could be found in two or three situations in 2013, as opposed to 9 out of 29 in 2011 (Table 3.8).

Table 3.8 *Identity verification of teachers*

Number of participants with:	2011 (n=24)	2013 (n=24)
(Almost) identity verification in all three situations	1	5
(Almost) identity verification in two situations	8	12
(Almost) identity verification in one situation	10	5
No identity verification in any situation	3	۷

Table 3.9Teachers' identity verification for each situation (N in 2011=24, N in 2013 = 24)

Number of participants with...

	idei verific	,	almost identity verification		partial identity verification		no identity verification		Total number of teachers	
Situations	2011	2013	2011	2013	2011	2013	2011	2013	2011	2013
Start of the lesson Student misbehavior	9	5 0	9	11 10	5 11	4 10	0 4	4 4	24 24	24 24
Positive student	2	8	10	10	6	2	5	4	23	24

3.5.4 Differences between teachers with healthy and unhealthy interpersonal identity standards

In 2011, 21 out of 24 teachers were considered to have a healthy interpersonal identity standard. For 8 of the 21 teachers, interpersonal identity verification took place in at least two (of the three) situations. These eight teachers were considered 'healthy matchers'. The other teachers with a healthy interpersonal identity standard were coded as 'healthy mismatchers' since they had a healthy interpersonal identity standard but lacked the interpersonal identity verification in at least two situations (Table 3.10).

Table 3.10

Change: (Un)healthy (mis)matchers

(Un)Healthy (Mis)matchers	Number of participants
Healthy mismatchers 2011/2013	13/6
Healthy matchers 2011/2013	8/16
Unhealthy (mis)matchers 2011/2013	3/2
Change from healthy mismatcher to healthy matcher	8
Change from unhealthy mismatcher to unhealthy matcher	1
Change from healthy matcher to healthy mismatcher	1
Change from unhealthy matcher to healthy matcher	1
No change	13/24 (mostly
-	healthy matchers)

Considering the change between 2011 and 2013, the majority of the teachers was stable in terms of identity verification and could often be characterized as 'healthy matchers' (13 out of 14). Once teachers were healthy matchers, they remained healthy matchers. These participants were from all ages and career phases.

The group of teachers who did change, often changed from being a 'healthy mismatcher' to being a 'healthy matcher' (8 participants). Many beginning teachers in our study went through this change. The number of teachers who could be characterized as 'healthy mismatchers' decreased from fifteen to six participants. For two of the five teachers who stayed in this group at least a slight change towards a healthy match could be found. For three participants no change could be found. The number of unhealthy (mis)matchers decreased from three to two participants; one respondent (Jane) changed from unhealthy matcher to healthy matcher.

3.6 Discussion

3.6.1 Increase of irrelevant affective appraisals

A possible explanation for the increase of irrelevant affective appraisals might be that teachers, due to their growth in classroom experience and interpersonal repertoire, were less surprised/intimidated by and more aware of the specific classroom situation (Ensley, 2006). These teachers might therefore experience and appraise a classroom situation not as 'stressful' or 'benign-positive' any more for their own wellbeing but as 'irrelevant'. It can also be that teachers learned to deal with their emotions between 2011 and 2013 and therefore thus appraised a situation as 'irrelevant' for their own wellbeing. Or, in line with previous research (van der Want et al., 2015), teachers' appraisal might become more irrelevant due to a change of focus and goals in their work (Chang & Davis, 2009).

3.6.2 More affiliation in evaluative appraisals and interpersonal identity standards

Both the evaluative appraisals as well as the interpersonal identity standards of many participants changed (in different degrees) towards more affiliation and to a lesser extent towards more control. When looking at our results with a focus on the differences between novice and expert teachers, a strict line between both career phases is hard to find: changes occur both for beginning as well as experienced teachers and in similar directions. The trend towards more affiliation for the evaluative appraisal and the interpersonal identity standard is in contradiction with studies on teacher interpersonal behavior during the teaching career (showing a slight decline). Also, Wubbels et al. (2006) and Wubbels and Brekelmans (2005) have shown that the level of control particularly increases during the first phase of the career, while these levels remained more or less stable in this study. It may be that standards and appraisals thus not directly reflect the actual behaviors displayed in the classroom.

3.6.3 Increase of teachers with identity verification

The increase in identity verification follows the expectations of Burke and Stets (2009). They (Burke & Stets, 2009) stated that in case of non-identity verification (as was the case for some of our participants in 2011), individuals will try to reduce their negative feelings by changing their behaviors, perceptions of situations and their identity standard in order to achieve identity verification (as was the case for some of our participants in 2013). The participants who lacked identity verification in 2011 often experienced negative feelings possibly due to this lack of identity verification and therefore they might have changed either their appraisal of specific situations or their interpersonal identity standard. Based on this research, we can only speculate about a possible explanation for teachers who lacked identity verification but who did not change. It might be that for these teachers other role identities were more important to them than the interpersonal role identity. Following Stryker (1980) and McCall and Simmons (1978), all role identities of a teacher are part of a hierarchy that consists of the interpersonal role but also of a subject matter-, didactical-, pedagogical-, and mentoring-role.

The position of the role identities in the hierarchy of a person is unique for every person and refers to their readiness to act out a certain role identity across situations (Burke & Stets, 2009). Teachers' hierarchy of role identities directly influences the choices teachers make in situations (Burke & Stets, 2009). For teachers with a mismatch, it might be that they consider other role identities to be more important than the interpersonal role identity and that they do not strongly experience their lack of interpersonal identity verification and therefore do not try to achieve interpersonal identity verification.

3.6.4 Teachers change

The results of our study imply that many teachers from our sample were able to change from healthy mismatcher to healthy matcher. Some (un)healthy mismatchers did not change in the two years. For some of them, no sign of the slightest change or future change towards identity verification was visible. Five of our 29 participants in 2011 left the teaching profession due to burnout, family life, contract not renewed, other job outside secondary education or health problems. Of these five participants that did not participate in 2013,

four were coded as unhealthy (mis)matchers or as healthy mismatchers. Two of the five participants explicitly mentioned during the interview in 2011 that they experienced difficulties with their relationship with students.

3.6.5 Problems of unhealthy (mis)matchers

An unhealthy matcher has an unhealthy interpersonal identity standard and matching 'unhealthy' evaluative appraisals. A teacher who can be characterized as an unhealthy matcher might - according to Burke and Stets - not feel a need to change their behavior or identity standard, since there is already a match. In our sample, there was one participant, the late career Arts teacher, Jane, who in 2011 was classified as a so-called 'unhealthy matcher' and who did change to a 'healthy matcher' in 2013. In 2013 there was also one participant, the 46 year old midcareer teacher of economics, David, who was an 'unhealthy matcher' in 2013, being in 2011 an 'unhealthy mismatcher'. This shows that changes do take place. A change towards a healthy interpersonal identity standard and matching evaluative appraisals is needed not only for teachers' wellbeing but also for student outcomes. However, the question arises if and what kind of defense mechanisms these teachers used in order to continue teaching. According to McCall and Simmons (1978) several coping methods or defense mechanisms can be used to protect oneself from pain or negative feelings and to stay in the teaching profession. Unhealthy (mis)matchers can be seen as examples of users of these defense mechanisms. These defense mechanisms might include (1) repression in which individuals push the (painful) emotion below the level of consciousness, (2) projection, in which teachers assign their negative feelings to others rather than attributing them to themselves, and (3) displacement, in which teachers' negative feelings are directed at others. Future research should aim to explore these defense mechanism and try to find possibilities to change the unhealthy interpersonal identity standard of teachers. Another opportunity for future research is to explore how to prevent teachers from developing an unhealthy interpersonal identity standard.

3.7 Limitations, implications and opportunities for further research

There are some limitations of this study. One of the limitations of this study is that although we have explored the important elements (i.e., appraisal and interpersonal identity standard) of the interpersonal role identity over a period of two years, our number of participants prevents us from drawing strong conclusions, for instance concerning the differences between teachers' interpersonal role identity in the various career phases. Also, when interpreting the results of this study, one should bear in mind that this study was conducted during a period of two years. To conduct research over a longer period of time is one of the challenges for future research. This could explore important questions such as 'do healthy matchers stay healthy matchers?' and 'can (un)healthy mismatchers stay in the teaching profession for a long time? In addition, this research focusses mainly on the change of respondents as a group. Further research with a focus on the individual changes of teachers could enrich the insights that were brought up by this study. Next to that, future research on other role identities could provide different insights in the concepts of role identity and could position - using for instance the concept of hierarchy - the interpersonal role identity among the other roles teachers fulfil. Moreover, future research could explore the necessity of identity verification; in some cases a lack of identity verification might be desirable in order to stimulate learning. This study shows that it is possible to change from a healthy mismatcher to a healthy matcher even without specific training or support. However, not all teachers managed to change themselves in the preferred direction. Some of them managed to continue teaching, others left the teaching profession.

The teachers who did not change need support during their career to change their interpersonal role identity. Teacher education programmes can start with this support by stimulating student teachers to develop a sound teacher interpersonal role identity with a healthy interpersonal identity standard and matching appraisals of situations so that interpersonal identity verification takes place. There might be a task not only for teacher educators but also for mentors/coaches in schools to help teachers become aware of their interpersonal role identity and, if necessary, to help them change their teacher interpersonal role identity. Previous research by Pillen has shown that teachers who experience a tension often do not seek help themselves and favor problem-focused coping strategies above

emotion-focused strategies (Pillen et al., 2013a). The concept of teachers' interpersonal role identity offers an instrument for teacher educators to make student teachers aware of their interpersonal identity standard and the appraisals of specific classroom situations by visualizing both the interpersonal identity standard and the appraisals in the Teacher Interpersonal Circle. In addition, discussing the teachers' interpersonal role identity using the Teacher Interpersonal Circle, can help student teachers to grow towards a healthy interpersonal identity standard and a matching appraisal.

3.8 Conclusion

Different from previous research on teacher identity as a holistic concept, this study took teacher identity roles as its basis for research. Consequently, the teacher-student relationship was conceptualized in terms of a teacher's interpersonal role identity. This chapter has presented a study of change in this role identity. Over time irrelevant affective appraisals increased and a trend towards more affiliation and more control was found both for the evaluative appraisals as for the interpersonal identity standards. All in all, many teachers changed and their identity verification increased. An exception was the group of teachers classified as 'unhealthy (mis)matchers'. The concept of teachers' interpersonal role identity, as coded with the Teacher Interpersonal Circle, offers a useful tool for teacher educators to support their student teachers and 'unhealthy (mis)matchers' to develop their interpersonal role identity. It might be concluded that the concept of role identities can offer a useful theoretical framework for future research on teacher identity and teacher-student relationships and at the same time be a practical tool for supporting teachers' identity development.

Chapter 4

The relation between teachers' interpersonal role identity and their wellbeing⁴

⁴ This chapter has been submitted for publication as: van der Want, A. C., den Brok, P., Beijaard, D., Brekelmans, M., Claessens, L. C. A., & Pennings, H. J. M. (submitted). *The relation between teachers' interpersonal role identity and their wellbeing.*

Abstract

This chapter investigates the relation between teachers' interpersonal role identity on the one hand and teacher wellbeing via its related aspects of self-efficacy, burn out, and work engagement on the other hand. Teachers' interpersonal role identity consists of their appraisal of specific situations in classrooms and their more general interpersonal identity standard. Teachers with three kinds of interpersonal role identity were used in this study: teachers with a healthy interpersonal identity standard and matching appraisals ('healthy matchers'); teachers with a healthy interpersonal identity standard with mismatching appraisals ('healthy mismatchers'); and teachers with an unhealthy interpersonal identity standard and either matching or mismatching appraisals ('unhealthy (mis)matchers). Using semi-structured and video-stimulated interviews, data on teachers' interpersonal role identity were collected and analysed using appraisal theory and interpersonal theory. Questionnaires were used to collect data on teacher wellbeing (self-efficacy, burnout, work engagement). Results showed that healthy mismatchers and unhealthy (mis)matchers might face difficulties with their teacher-student relationship and/or their wellbeing, especially for self-efficacy differences between the teachers were found. The outcomes of this study suggest that during teacher education specific attention should be paid to teachers' interpersonal role identity in order to help student teachers to develop their interpersonal role identity and to increase their wellbeing.

4.1 Introduction

During the last two decades, an increasing number of studies has focused on the professional identity of teachers and the importance (and consequences) of professional identity (development) for teacher wellbeing, for meeting the everyday challenges and tensions in the classroom, for teaching well, and ultimately for staying in the profession (e.g., Beauchamp & Thomas, 2009; Beijaard et al., 2004). In these studies, the interpersonal or teacher-student relationship appeared to be an important element within the professional identity of teachers (Beijaard, 1995). Teachers often relate their experiences or tensions in their professional identity development to teacher-student relationships (Pillen et al., 2013a). Moreover, many teachers experience problems with teacher-student relationships (Evertson & Weinstein, 2006; Wubbels et al., 2006) and problems with teacher-student relationships are seen as one of the major reasons for teacher burnout (Tatar & Horenczyk, 2003).

In this study, we will therefore explore the relation between teacher wellbeing and the professional identity of teachers concerning the teacher-student relationship, referred to as teachers' interpersonal role identity (cf. van der Want et al., 2015). With this study, we aim to explore associations between both teacher wellbeing and teachers' interpersonal role identity with 29 participants. Following Burke and Stets (2009), teachers' interpersonal role identity is seen as a system in which two main elements - interpersonal appraisal and interpersonal identity standard - influence each other. The interpersonal appraisal is the process of evaluating a classroom situation with respect to its importance to a teacher's wellbeing (Admiraal et al., 2000; Lazarus & Folkman, 1984). The interpersonal identity standard is a frame of reference, consisting of the set of self-relevant meanings that define the character of teachers' interpersonal role identity (Burke & Stets, 2009). For example, when the teacher is waiting for the students to enter the classroom at the start of the lesson and the students enter the classroom talking loudly to each other without greeting or paying attention to the teacher, the teacher can evaluate this situation in different ways. For example, s/he might think that it is important to let the students settle and have a minute to talk informally to their peers. Or s/he might think that it is very important that students greet the teacher shortly immediately followed by the start of the lesson and that therefore everyone should be quiet and prepared to begin the lesson immediately. In a situation in which the identity standard is confirmed during the appraisal, *interpersonal role identity verification* occurs: appraisals of specific classroom situations by the teacher are consistent with a teacher's interpersonal identity standard. A *lack of identity verification* occurs when teachers' appraisals of such situations do not match with their interpersonal identity standards. When there is a lack of identity verification, "(...) people become upset or distressed in varying degrees" and thus will try to change this (Burke & Stets, 2009, p. 208). This can be done by either changing the appraisal of a situation ('maybe the classroom was not as chaotic as I thought it was') or by changing the identity standard ('maybe in general students do not have to be quiet all the time and listen to me, it can be good for them to chitchat a bit and walk around every now and then').

Drawing upon previous studies in which the teacher-student relationship was related to student outcomes and teacher wellbeing (Wubbels et al., 2006) two kinds of interpersonal identity standards could be distinguished: healthy and unhealthy interpersonal identity standards (Figure 4.1). Healthy interpersonal identity standards (e.g., being steering, friendly, understanding) are negatively related to teachers' stress and positively related to student outcomes and can be described as having a high level of control combined with a high level of affiliation in terms of the Teacher Interpersonal Circle. Unhealthy interpersonal identity standards (e.g., being uncertain, dissatisfied, reprimanding) can be described as having a low level of control combined with a low level of affiliation and are positively related to teachers' stress and negatively related to student outcomes (Wubbels et al., 2006).

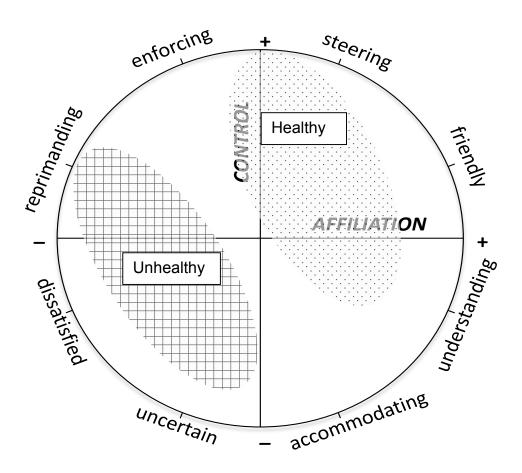


Figure 4.1. Teacher Interpersonal Circle depicting healthy and unhealthy areas of interpersonal identity standards (cf. Wubbels et al., 2006)

Following Eder's (1995, 2002) definition of wellbeing for students, we describe teacher wellbeing as the degree to which a teacher feels good at school and is free of school-related psychological or psychosomatic problems (cf. Belfi, Goos, de Fraine, & van Damme, 2012). In several studies, wellbeing is researched by studying relevant aspects for wellbeing, among which self-efficacy (Engels et al., 2004), burnout (Spilt et al., 2011) and work engagement (Schaufeli, & Bakker, 2003). In this study, we will focus on the relation between wellbeing (in this study investigated via self-efficacy, burnout, and work engagement) and teachers' interpersonal role identity.

A considerable amount of studies has been conducted on aspects often ascribed to wellbeing and concepts related to teachers' interpersonal role identity. For instance, in their

Vitae study Day et al. (2006) showed that a good teacher-student relationship helps teachers to stay motivated for doing their jobs. Veldman and colleagues found similar results in their case study of four experienced teachers (Veldman et al., 2013). In addition, teachers' selfefficacy (Tschannen-Moran & Woolfolk Hoy, 2001), work engagement (Schaufeli, & Bakker, 2003), burnout (Friedman, 2006) as well as their general wellbeing (Spilt et al., 2011) have also been found to be important for or related to teachers' professional identity and teacher-student relationships. Some studies have been conducted about the importance of either the appraisal or the interpersonal identity standard for the wellbeing of teachers (Admiraal et al., 2000; Chang, 2009; Veldman et al., 2013). However, most studies were positioned in the context of emotional coping with student misbehavior or solely focussed on emotions and appraisals. Next to that, there have been studies on the relation between wellbeing and teacher-student relationships (Admiraal, et al., 2000; Riley, Watt, Richardson, & de Alwis, 2012; Veldman et al., 2013) and studies on the relationship between teacher identity and wellbeing (Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2011). Whereas in previous studies many combinations of the above mentioned core concepts have been made, there is to our knowledge no study in which all three concepts (teacher wellbeing, teachers professional identity and teacher-student relationship) were combined.

In this study we explore the relation between teachers' interpersonal role identity and teacher wellbeing. The research question of this study is thus the following: What is the relation between teachers' interpersonal role identity and teachers' wellbeing?

We expect that teachers with a healthy match between the interpersonal identity standard and appraisal of specific classroom situations will score higher on self-efficacy scales and work engagement scales and less on burnout scales compared to teachers with an unhealthy match or teachers with a mismatch, either healthy or unhealthy. In this exploratory study we will try to get a first indication of this. Based on our small sample of participants we must be very cautious with the results of this exploratory study.

4.2 Background of this study

Previous research presented in this dissertation described the link between teachers' appraisals of specific classroom situations and their more general interpersonal identity standards, which together form their interpersonal role identity (Chapter 2). In this section, other key elements of the study will be further elaborated. First, our previous study and the concept of teachers' interpersonal role identity will be described, followed by an elaboration of teacher wellbeing (referred to in terms of self-efficacy, burnout, and work engagement). After that, the more specific research questions for this study based on the theoretical framework will be presented.

In our previous study (van der Want et al., 2015; see also Chapter 2), teachers' interpersonal role identity was empirically explored within a sample of 29 teachers in secondary education (see Table 4.1). To select participants, we invited teachers through large internet fora and by using a network of schools from teacher training institutes to complete the Questionnaire on Teacher Interaction (QTI) (Wubbels et al., 2006) in one of their classes. The QTI is based on the Teacher Interpersonal Circle, which depicts the interpersonal relationships between students and teachers. In the Teacher Interpersonal Circle the teacher-student relationships are conceptualised in terms of two dimensions that are both independent and necessary to describe a complete picture of the teacher-student relationship: a control dimension and an affiliation dimension. The control dimension describes the degree of influence a teacher has when interacting with students and the affiliation dimension describes the degree of cooperation or opposition between the teacher and the students. The two dimensions (Figure 4.1) can be subdivided into the following eight categories: steering, friendly, understanding, accommodating, uncertain, dissatisfied, reprimanding, and enforcing (Wubbels et al., 2006).

In order to obtain data about teachers' interpersonal role identity two interviews per teacher were used for data collection: a semi-structured interview and a video-stimulated interview. The semi-structured interview was conducted to gain insight into teachers' interpersonal identity standard; the coding procedure was based on the Teacher Interpersonal Circle. The video-stimulated semi-structured interview was held to study teachers' appraisals of three specific classroom situations (the start of the lesson, reacting to student misbehavior, and reacting to positive student behavior). The evaluative

appraisals were also coded using the categories of the Teacher Interpersonal Circle. Interrater reliability was found sufficient for the codes of both the analysis of the interpersonal identity standard as well as for the analysis of the appraisals of specific classroom situations. In order to measure per participant whether interpersonal identity verification occurred, we compared the codes of the interpersonal identity standards and the interpersonal appraisals. If exactly the same codes or codes positioned next to each other on the circle were assigned to a particular teacher, this was considered as 'a match' according to interpersonal identity verification. If the codes from the interpersonal identity standard and the interpersonal appraisal differed by a distance of two or more categories from each other in the Teacher Interpersonal Circle, then this was considered as a 'mismatch' between the interpersonal identity standard and the interpersonal appraisal, thus a lack of interpersonal identity verification. A matrix was constructed in order to create an overview of the data.

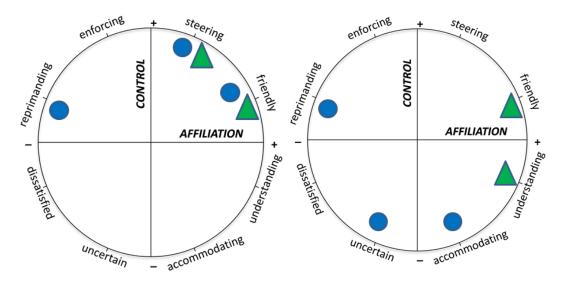
The results of the study showed that for about half of the teachers, their interpersonal appraisal of two or three classroom situations matched their interpersonal identity standard. For the other half of the teachers, these appraisals did not match, or did only match in one situation with their interpersonal identity standard and, accordingly, interpersonal role identity verification did not take place.

The study also indicated that if the emotions accompanying the affective appraisal of teachers were positive, this resulted in an evaluative appraisal which was most often steering, friendly or understanding. As such positive affective appraisals played an important role for teachers' interpersonal role identity and the possible lack of interpersonal identity verification (van der Want et al., 2015). Other researchers have also stated that teaching is an occupation that involves considerable emotional labour, which involves effort, planning, and control (Chang, 2009; Meyer, 2009). As such, emotional labour has been associated with job dissatisfaction, health symptoms, and emotional exhaustion, which are key components of burnout (Schutz & Zembylas, 2009). Next to that, researchers have found that emotions are inextricably linked to teachers' work, development, teachers' interpersonal role identity (e.g., den Brok, van der Want, Beijaard, & Wubbels, 2013), teacher-student relationships and teacher wellbeing (Schutz & Zembylas, 2009).

For the present study, all participants from the prior study were first assigned to two groups: one group consisted of teachers with a healthy interpersonal identity standard, and another group consisted of teachers with an unhealthy interpersonal identity standard. Healthy is defined as a high level of control combined with a high level of affiliation. Unhealthy is defined as a low level of control combined with a low level of affiliation (see Figure 4.1). In a following step, the group of teachers with a healthy interpersonal identity standard was also divided into groups: one group consisted of participants with interpersonal identity verification or 'a match' in two or three of the researched situations while the other group consisted of the participants with no interpersonal identity verification - 'a mismatch', or verification in only one situation. The unhealthy match group and the unhealthy mismatch group were combined, as both contained very few participants. This resulted in 3 groups of participants: (A) Healthy match (n=9), (B) Healthy mismatch (n=15), and (C) Unhealthy (Mis)Match (n=5) (see Table 4.1). Figure 4.2 presents an example of a participant from each of the groups. Looking at Group A, the Healthy Matchers in Figure 4.2, for example, the Dutch language teacher Lucy has an interpersonal identity standard denoting 'steering and friendly', which is a healthy interpersonal identity standard. In addition, Lucy's appraisals of the situations, represented by the different dots/circles are mostly positioned in the same area as her interpersonal identity standard: steering and friendly. This means that, in the case of Lucy, interpersonal identity verification has taken place and that her match is a healthy one. In this study, we will use these 3 groups (Table 4.1) to study the relation between teachers' un/healthy match/mismatch and their wellbeing. In the upcoming section, we will describe teacher wellbeing.

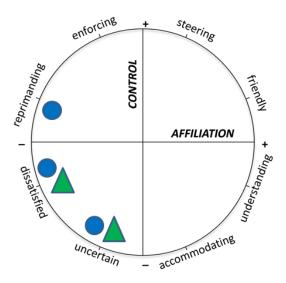
4

Figure 4.2. Examples of teachers from the three groups: Interpersonal Identity Standards and Appraisals



Group A (n=9): Lucy

Group B (n=15): Michael



Group C (n=5): Andrew

Legend:

Interpersonal Identity Standard

Appraisal of situations in the classroom

4.2.1 Teacher wellbeing

As mentioned earlier, the wellbeing of teachers can be seen as the degree to which a teacher feels good at school and is free of school-related feelings or fear and psychological or psychosomatic problems (Eder, 1995, 2003; cf. Belfi et al., 2012). In our view, teacher's wellbeing is a neutral term which can be used to describe a teachers' emotional state related to work. Wellbeing is either positively or negatively and includes a teacher's belief in his or her own ability to teach. Therefore, following Eder's (1995, 2003) line of thought, wellbeing is regarded in this study as an overarching concept, referred to in terms of self-efficacy, burnout, and work engagement. These three distinct constructs are described below.

4.2.2 Self-efficacy

Teachers' self-efficacy is the extent to which the teacher believes that he or she has the capacity to affect desired outcomes of student engagement and learning (Brouwers & Tomic, 2000; Tschannen-Moran & Woolfolk Hoy, 2001).

According to Tschannen-Moran and Woolfolk Hoy (2001), teachers' self-efficacy influences their persistence, the effort they invest in teaching, and the goals they set. Self-efficacy is found to be important in relation to professional identity (e.g., Canrinus et al., 2011; Hong, 2010) and teacher-student relationships (Brouwers & Tomic, 2000). Self-efficacy in this study is related to three teaching components: classroom management, student engagement, and instructional strategies (Tschannen-Moran & Woolfolk Hoy, 2001). Classroom management efficacy refers to a teacher's belief to be able to develop and maintain classroom order. Student engagement efficacy refers to a teacher's belief to be able to motivate students and to engage them in their own learning process. Instructional strategy efficacy refers to a teacher's belief to be able to use various pedagogical-didactical techniques in the classroom.

4.2.3 Burnout

Teaching can be considered as a high-stress occupation (Gold & Roth, 1993). Several studies have explored the field of teacher burnout, showing high rates of burnout and attrition (Hultell, Melin, & Gustavsson, 2013; Tatar & Horenczyk, 2003). Similar to other countries, the burnout rate for teachers in the Netherlands is higher than other professions due to high psychological work pressure, low levels of agency, and limited possibilities for career/professional development. Brouwers and Tomic (2000) state that burnout is a phenomenon of "dramatic importance in education" (Brouwers & Tomic, 2000, p. 239). Secondary school teachers' demands consist of a substantial degree of emotionally caring relationships with students. Several studies have elicited the positive effect of student misbehavior on teacher burnout (Burke, Greenglass, & Schwarzer, 1996). Burnout is defined as "a prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach et al., 2001, p. 397) and consists of the three elements emotional exhaustion, cynicism/depersonalisation, and individuals' reduced personal accomplishment in their work environment (Brouwers & Tomic, 2000). Emotional exhaustion refers to energy depletion or a draining of emotional resources, possibly caused by interpersonal demands, and is characterised by severe physical, mental, and emotional fatigue. Cynicism is an attempt to distance oneself from the job by actively developing negative attitudes towards it. Reduced feelings of personal accomplishment are the tendency of evaluating one's work negatively (Brouwers & Tomic, 2000).

4.2.4 Work engagement

Work engagement can be defined as a high level of energy and as a strong identification with one's work in a positive, fulfilling, work-related state of mind that is characterised by vigor, dedication, and absorption (Bakker, Schaufeli, Leiter, & Taris, 2008). Studies have found work engagement to be an independent concept negatively related to burnout (Bakker et al., 2008). In this study, work engagement is measured with three scales: vigor, dedication and absorption. "Vigor is characterised by high levels of energy and mental resilience while working, a willingness to invest effort in one's work and to persist when facing difficulties. (Bakker et al., 2008, p. 188). Dedication is characterised by being involved in one's work, experiencing enthusiasm, inspiration and pride. "Absorption is

characterised by being fully concentrated and being happily engrossed in one's work" (Bakker et al., 2008, p. 188).

4.3 Research question

The central research question of this study is: how does teacher wellbeing in terms of self-efficacy (a), burnout (b) work engagement (c), differ between healthy matching teachers, healthy mismatching teachers and unhealthy (mis)matching teachers?

Based on the background of our study, it is expected that healthy matchers (i.e., participants with interpersonal identity verification and a healthy interpersonal identity standard) score higher on work engagement and self-efficacy and lower on burnout compared to healthy mismatchers and unhealthy matchers. Unhealthy matchers are expected to score lower on work engagement and self-efficacy and higher on burnout than healthy mismatchers and healthy matchers. Healthy mismatchers are expected to score lower on work engagement and self-efficacy and have a higher chance on burnout than teachers with a healthy match.

4.4 Method

4.4.1 Participants

This study was based on a prior study (see chapter 2 of this dissertation) and conducted among 29 teachers in general secondary schools in the Netherlands.

¹ All names are fictitious for reasons of anonymity

Table 4.1 presents an overview of the participants, their gender, age, years of teaching experience, subject taught, interpersonal identity standards, whether their interpersonal identity standards can be considered as healthy or unhealthy, and their interpersonal identity verification in terms of match or mismatch. As can be seen from Table 4.1, the majority of the teachers (group A/Healthy matchers, n=9) have a healthy interpersonal identity standard and interpersonal identity verification. There is also a group (Group B/Healthy mismatchers, n=15) of teachers who have a healthy interpersonal identity standard but no interpersonal identity verification. The teachers (group C/Unhealthy (mis)matchers, n=5) who have an unhealthy interpersonal identity standard with or without interpersonal identity verification are teachers who have an unhealthy interpersonal identity standard (for example being uncertain and dissatisfied) and appraise situations differently from their interpersonal identity standard.

4.4.2 Data collection and procedure

To collect data on teachers' self-efficacy, burnout, and work engagement, participants were invited to complete a questionnaire. The questionnaire consisted of the Utrecht Burnout Scale for teachers (UBOS-L; Schaufeli, Leiter, Maslach, & Jackson, 1996), the Utrecht Work Engagement Scale for teachers (UWES; Bakker et al., 2008), and a translated version of the Teacher Sense of Self-efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001). All 29 participants completed the questionnaire at an organised meeting at a university in the Netherlands in November 2010. The interviews that were collected for the data concerning healthy/unhealthy (mis)matchers, were collected between March and July 2011.

4.4.3 Instrumentation

Self-efficacy

The validated and reliable Tschannen-Moran and Woolfolk Hoy short version of the Teachers Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) used in this study contained 12 items. In our study these were scored on a 7-point Likert scale ranging from 1 (not at all) to 7 (very well) and consisted of three scales: Classroom Management, Student Engagement, and Instructional Strategies. Tschannen-Moran and Woolfolk Hoy (2001) reported Cronbach's alphas between .81 and .86. Table 4.2 displays the scales, including their satisfying reliability for the present study and original sample items.

Burnout

Burnout was measured with the Dutch version of the Maslach Burnout Inventory - General Survey (Schaufeli et al., 1996; Schaufeli & Dierendonck, 2000). The teachers' version of this questionnaire, the UBOS-L, was used. The questionnaire consisted of 22 items (7-point Likert scale ranging from 0 [never] to 6 [every day]) divided into three subscales: Emotional Exhaustion, Cynicism/Depersonalisation, and Personal Accomplishment. High scores on the Emotional Exhaustion scale and on the Cynicism/Depersonalisation scale and a low score on the Personal Accomplishment scale are (together) indications of burnout (Brouwers & Tomic, 2001). In the original study of Schaufeli and Dierendonck (2000), the reported alpha's varied from .73 to .92. Original sample items and Cronbach's alphas for the present study can be found in Table 4.2 and are again satisfying, except for the Cynicism/Depersonalisation scale, which is low and for which results should be interpreted with caution.

Work engagement

Work engagement was assessed with the short, nine-item version of the Utrecht Work Engagement Scale (UWES) (Bakker et al., 2008; Schaufeli, Shimazu, & Taris, 2009), which has been validated in several countries. The 9 items of the UWES are scored on a 7 point Likert scale with scores ranging from 0 (never) to 6 (every day), and consist of three scales: vigor, dedication, and absorption. Previously reported Cronbach's alphas (cf. Schaufeli & Bakker, 2003) exceed .70. (see Table 4.2 for reliability of the present study and original sample items).

Table 4.2

Overview of self-efficacy, burnout, and work engagement: scales, reliability, and example items

Construct	Scale	Cronbach's alpha (n=29)	Example item
Self- efficacy	Instructional strategies	.68	To what extent can you craft good questions for your students?
	Classroom Management	.78	How much can you do to control disruptive behavior in the classroom?
	Student Engagement	.74	How much can you do to motivate students who show low interest in school work?
Burnout	Emotional exhaustion	.88	I feel emotionally drained from my work.
	Personal Accomplishment	.69	I feel that I can achieve important things in my job.
	Cynicism/Depersonalization	.42	I am frustrated because of my job.
Work Engagement	Absorption	.72	Time flies when I'm working.
	Dedication	.88	I find the work that I do full of meaning and purpose.
	Vigor	.85	At my work, I feel bursting with energy.

4.5 Analysis

First, a descriptive analysis was conducted to explore the data of each of the 29 participants for the 3 groups (see Table 4.3). To map the relationship between wellbeing (self-efficacy, burnout, and work engagement) and interpersonal identity verification, analyses were performed in IBM SPSS Statistics version 19 in several steps. Several analyses of variance were carried out to map the difference between the three groups (independent variables) for their scores on self-efficacy, burnout, and work engagement (dependent variables). A Scheffé post-hoc test was carried out to analyse the statistically significant differences which resulted from the analysis of variance. The results are presented in Table 4.3.

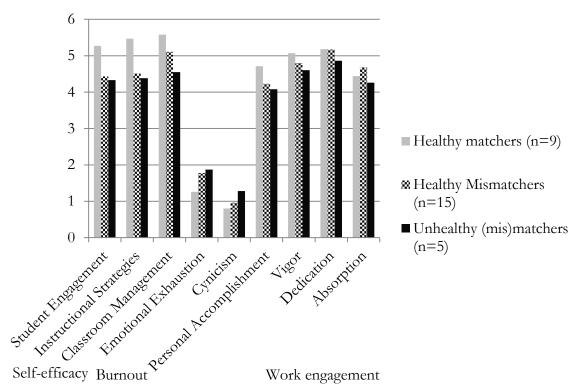
4.6 Results

In this study we explored the relation between teacher interpersonal role identity and teacher wellbeing via self-efficacy, burnout and work engagement. To answer the research question, first means and standard deviations were calculated for wellbeing (concepts of self-efficacy, burnout, and work engagement). The results are reported in Table 4.3 and Figure 4.3. When comparing the means on the burnout scores listed in Table 4.3 with the norm scores of 1677 Dutch secondary school teachers (Schaufeli & Dierendonck, 2000), the scores of the participants in our study show average scores for Emotional Exhaustion, low to average scores for Cynicism/Depersonalisation and average to high scores on Personal Accomplishment.

 Table 4.3

 Descriptive statistics and analysis of variance for scales of the constructs

Construct	Scale	Group ¹	Mean ²	SD	\boldsymbol{F}	Df	P
Self-efficacy	Student Engagement	A	5.27	.70			
		В	4.43	.92			
		C	4.33	1.48			
		Total	4.67	1.02	2.49	2	.10
	Instructional Strategies	Α	5.47	.55			
		В	4.51	.65			
		С	4.38	1.00			
		Total	4.79	.81	6.37	2	<.01*
	Classroom Management	Α	5.58	.51			
		В	5.11	1.00			
		С	4.55	1.13			
		Total	5.16	.94	2.12	2	.14
Burnout	Emotional Exhaustion	A	1.26	.65			
		В	1.78	1.02			
		С	1.87	.92			
		Total	1.63	.91	1.11	2	.34
	Cynicism	Α	.80	.40			
	,	В	.96	.52			
		С	1.28	.56			
		Total	.97	.50	1.46	2	.25
	Personal Accomplishment	A	4.71	.59			
	r	В	4.23	.74			
		С	4.08	.77			
		Total	4.35	.72	1.71	2	.20
XV7 1	Vigor	A	5.07	1.07			
Work		В	4.8	.90			
engagement		С	4.6	1.09			
		Total	4.85	.97	.40	2	.66
	Dedication	Α	5.18	1.05			
		В	5.17	.78			
		C	4.86	1.01			
		Total	5.12	.88	.24	2	.78
	Absorption	A	4.44	1.38	-		
	r	В	4.68	.98			
		C	4.26	.98			
		Total	4.54	1.09	.31	2	.73
		•	-				



Theoretical range mean scores per scale (min-max): self-efficacy(1-7), burnout (0-6) and work engagement (0-6).

Figure 4.3 Visual overview of the scale scores for each of the three constructs per group.

When focusing on the differences between the healthy matchers (A), healthy mismatchers (B) and the unhealthy (mis)matchers (C) more closely, a one-way ANOVA was used to test the differences between the groups for all the scales of the three constructs. The results are presented in the three columns on the right side of Table 4.3 (F, df, and p). The results show a statistically significant difference for Instructional Strategies (self-efficacy) (F (2.26) = 6.37, <.01). The Scheffé post-hoc test indicated this difference to be statistically significant between group A, the healthy matchers, and C, the unhealthy (mis)matchers (p=.032) and between group A and group B, the healthy mismatchers (p=.011). The effect sizes for these analyses (d=1.35 and d=1.59) exceeded Cohen's (1988) convention for a large effect (d=.80). This means that the teachers with a healthy match scored significantly higher on instructional strategy efficacy than the participants with an unhealthy (mis)match and that teachers with a healthy match scored significantly higher on instructional self-efficacy than teachers with a healthy mismatch. However, for none of the

other variables involved in this study statistically significant differences were found between the different groups of teachers.

4.7 Discussion and conclusion

In this study, we explored the relationship between teachers' interpersonal role identity (consisting of their interpersonal identity standards and their appraisals of specific classroom situations) and teacher wellbeing (self-efficacy, burnout, and work engagement). We investigated this relationship via three groups of participants: teachers with a healthy interpersonal identity standard and matching appraisals (Group A, 'healthy matchers'); teachers with a healthy interpersonal identity standard with mismatching appraisals (Group B, 'healthy mismatchers'); and teachers with an unhealthy interpersonal identity standard and either matching or mismatching appraisals (Group C, 'unhealthy (mis)matchers).

4.7.1 Self-efficacy

Teachers with a healthy match (Group A/healthy matchers) scored statistically significantly higher on Instructional Strategies and compared to teachers with a healthy mismatch and compared to teachers with an unhealthy (mis)match (Group C/unhealthy (mis)matchers). The results of the relationship between teachers' interpersonal role identity and self-efficacy underline previous research which defines self-efficacy as a relevant aspect of professional identity (Canrinus et al., 2011) or who stress the importance of self-efficacy for beginning teachers who are developing their teacher identity (Day & Gu, 2007). Different from previous research was that in the present study the focus was on a specific part of teacher identity, the interpersonal role. This implies that concerning wellbeing and teacher-student relationships, this specific interpersonal role identity is of great importance.

4.7.2 Burnout

Considering burnout, we expected that teachers with a matching interpersonal identity standard (matchers) would score lower on burnout than the teachers with a mismatching interpersonal identity standard, since matchers would have a more balanced

interpersonal role identity and thus might feel more at ease while teaching. However, this was not confirmed by our results, as both the (un)healthy-ness and the match/mismatch were unrelated to teachers' scores on burnout, even though a small trend in the expected direction was visible. Possibly, with a bigger sample this relation might become statistically significant.

4.7.3 Work engagement

Within the current sample mean scores on work engagement for healthy matchers (A) seemed somewhat higher than unhealthy (mis)matchers, suggesting that teacher with a healthy interpersonal identity standard and matching appraisals might be more engaged in their work than teachers with unhealthy interpersonal identity standards. However, none of the differences between groups for work engagement were statistically significant. Again, research with a larger and more diverse sample might show different results.

4.7.4 Wellbeing and teachers' interpersonal role identity

While not the first study in teachers' interpersonal role identity or teacher wellbeing, this study has explored the relation between these two constructs in more detail. The results show that the nature of the interpersonal identity standards (whether healthy or unhealthy) matters for some aspects of teacher wellbeing (e.g. instructional self-efficacy) and that it makes a difference whether the appraisal of certain specific situations matches with the interpersonal identity standards (i.e., whether identity verification takes place). The results partially confirmed our expectations in the sense that the three groups differed in terms of instructional self-efficacy, but not on other well-being constructs. The results thus indicate a relationship between a healthy interpersonal identity standard and matching appraisals of specific classroom situations for teachers' instructional self-efficacy. Furthermore, the results from our study indicate that for the (self-efficacy part of) wellbeing of teachers a healthy interpersonal identity standard and matching appraisals are preferable over unhealthy interpersonal identity standards and mismatching appraisals. However, the nature of this relationship still remains unclear.

Interestingly, the results of the present study are drawn from a sample of teachers who voluntarily participated in this research. Even participants with an unhealthy interpersonal identity standard participated voluntarily. The number of unhealthy mismatchers might in reality be larger than one would expect based on this research. With a larger sample this might become even more prominent and would enable us to distinguish the unhealthy matchers from the healthy matchers, which would make it possible to tailor support specifically to these groups. Literature often suggests that teacher wellbeing is related to teacher behavior and workload (Schaufeli, Daamen, & van Mierlo, 1994; Spilt et al., 2011).

Our research shows that the personal side of teaching, in our case the teacher interpersonal role identity, is to some degree important for wellbeing. This being said, the development of teachers interpersonal role identity including a healthy interpersonal identity standard and matching interpersonal appraisals should get more attention in teacher education programmes. Working on the teacher interpersonal role identity will affect teachers' self-efficacy (Canrinus et al., 2011) which is a start because teachers need self-efficacy to grow.

4.8 Limitations

Due to the small sample size and the exploratory nature of the study, the results must be seen as only a first indication and have to be interpreted with caution. For instance, potentially because of the sample size, many of our results were not statistically significant, which means that the results presented should be seen as trends rather than a strong/large difference between groups. A larger sample might give a more distinct answer to the research question.

This study focussed on the interpersonal role or interpersonal domain of a teacher's professional identity in relation to wellbeing. Other role identities or domains of identity might also be of importance for teacher wellbeing. In addition, the appraisals of the specific situations were limited to three fixed situations per participant, selected by the researcher (van der Want et al., 2015). The appraisals might be biased due to their limited number or by the selection of the researcher. More appraisals to be selected by the participant might

give a more comprehensive view into the appraisals of various situations a teacher encounters during the lessons, which might affect/relate to teachers' interpersonal role identity.

The reliability of one of the scales of burnout (Cynicism/Depersonalisation) was quite low (.42). Deleting specific items from the scale did not result in a remarkable change and therefore we decided to include all the original items of this scale. This being said, the results concerning burnout, and especially with Cynicism/Depersonalisation, should be interpreted with care.

4.9 Suggestions for further research

The scores of healthy mismatchers (B) and unhealthy (mis)matchers (C) point out that these teachers face difficulties with their teacher-student relationship and/or their wellbeing. This raises the question of what to do with these teachers who are unhealthy matchers and how to stimulate them to develop towards a 'healthy matcher'. An opportunity for future research might be to investigate the causal relationship between teachers' interpersonal role identity and teacher wellbeing. Such research could also include a more in-depth exploration of data, for example investigating (possible) associations between the (number of) affective appraisals (positive/negative/irrelevant) and wellbeing.

4.10 Practical implications

Healthy interpersonal identity standards and matching appraisals enable teachers to feel at ease in the classroom and might prevent them from burnout. Teacher educators can support student teachers by: (1) helping student teachers discover and making them aware of their interpersonal identity standard, (2) stimulating student teachers to develop a healthy interpersonal identity standard, (3) paying attention to the appraisals of specific situations, and (4) facilitating student teachers to grow towards a match between their healthy interpersonal identity standard and their appraisal of classroom situations. In addition, similar to what is suggested by other researchers (Pillen, den Brok, Beijaard, 2013b), it would be helpful for coaching and training programmes to make student teachers aware of their teacher interpersonal role identity, their (un)healthy (mis)match, and what the

4

consequences of this might be for teachers' wellbeing and its career impact. To investigate the relation between the interpersonal role identity and teacher wellbeing longitudinally and with a larger sample will offer possibilities to gain insight in how both constructs develop and how they possibly influence each other.

Chapter 5

Exploring changes in teachers' interpersonal role identity

5

Abstract

This chapter explores possible factors influencing the change of teachers' interpersonal role identity. Teachers' interpersonal role identity consists of their appraisal of specific situations in classrooms and their more general interpersonal identity standard. Data of 8 teachers who experienced a change concerning their interpersonal role identity over time were analyzed.

The results of this study indicated that teachers experienced this change themselves, felt able to teach (average to high score on self-efficacy), enjoyed teaching (average to high score on work engagement) and were open to learn new things (high intellect, BIG 5). The interpersonal role was not perceived by them as more important than other roles. All teachers changed their appraisals of specific classroom situations and many of them also changed their interpersonal identity standards to a certain degree. The results of this chapter demonstrate that teachers themselves initiated changes or that these changes were initiated by the school context.

5.1 Introduction

Previous research presented in this dissertation described the link between teachers' appraisal of specific classroom situations and their more general interpersonal identity standard, which together form their interpersonal role identity. The research showed that 13 of the 29 teachers had an interpersonal identity standard that matched (to some degree) their appraisals of specific classroom situations (Chapter 2). In terms of their interpersonal role identity, three groups of teachers could be distinguished (Chapter 3): teachers with a healthy interpersonal identity standard and matching appraisals ('healthy matchers'); teachers with a healthy interpersonal identity standard with mismatching appraisals ('healthy mismatchers'); and teachers with an unhealthy interpersonal identity standard and either matching or mismatching appraisals ('unhealthy (mis)matchers'). A matching identity standard and appraisal appeared to relate positively to teachers' wellbeing (Chapter 4).

The first group consisted of teachers with a healthy interpersonal identity standard (e.g., an identity standard reflected by high levels of control and high levels of affiliation) and matching appraisals of classroom situations. Teachers in this group were called 'healthy matchers'. The second group consisted of teachers with a healthy interpersonal identity standard and mismatching appraisals of classroom situations. Teachers in this group were called 'healthy mismatchers'. The third group consisted of teachers with an unhealthy interpersonal identity standard (e.g., an identity standard reflected by low level of control and a low level of affiliation) and either matching or mismatching appraisals of classroom situations. Teachers in this group were called 'unhealthy (mis)matchers'. Subsequently, we studied the three groups over a period of two years and found that most teachers classified as 'healthy matchers' remained 'healthy matchers' and that several of the 'unhealthy (mis)matchers' left the profession or remained unhealthy (mis)matchers (Chapter 3).

A number of healthy mismatchers changed between 2011 and 2013 and became healthy matchers. These teachers are the respondents in this study. In chapter four of this dissertation we underlined the importance for teachers' wellbeing to become healthy matchers. Teachers with a healthy match had lower burnout scores than teachers with a healthy mismatch. Teachers with a healthy match also had higher self-efficacy scores (Chapter 4).

If it is important for teachers to become healthy matchers, how does this occur? Our previous research showed that it is possible for teachers to change from healthy mismatcher to healthy matcher (Chapter 4). However, it was not investigated why and how teachers change their interpersonal role identity, which is the focus of this chapter. To gain more insight in this we will use a multiple case design consisting of the eight teachers who changed from being a healthy mismatcher to a healthy matcher.

The research question for this study is thus: Which factors affect the change of teachers' interpersonal role identity?

We will first explore these teachers' self-reported experiences regarding their change from healthy mismatchers to healthy matchers via interview data, followed by an attempt to characterize this change. Next to data on these teachers' interpersonal role identity (i.e., data on interpersonal identity standards and appraisals of classroom situations), data on wellbeing and personality (BIG 5) as well as data on the importance teachers attach to the interpersonal role in relation to other teaching roles (i.e., their role as subject matter expert, didactic expert, and pedagogic expert) were also collected. We will also explore whether or not these variables may relate to the change of teachers' interpersonal role identity from healthy mismatchers to healthy matchers. The results of this study may be of help to teacher educators and coaches/mentors in schools in supporting teachers to change their interpersonal role identity.

5.2 Method

5.2.1 Participants

Our previous research (n=24) showed that the most remarkable change in teachers; interpersonal role identity between 2011 and 2013 was the change of eight teachers who were 'healthy mismatchers' in 2011, but changed during the years and became 'healthy matchers' in 2013. These eight teachers are the participants of this chapter's study (see Table 5.1). The teachers differ in age, years of experience and subjects taught.

Table 5. 1

Overview of the participants

Name (Alias¹)	,		Years of teaching experience		
John	Male	25	Physics	1	
Patrick	Male	43	Physics	1	
Joyce	Female	47	French	9	
Jane	Female	28	Chemistry	1	
Peter	Male	28	Biology	2	
Charlotte	Female	50	Dutch	12	
David	Male	47	Physics	11	
Adrian	Male	54	Geography	26	

¹ All names are fictitious for reasons of anonymity

5.2.2 Data collected and available for analysis

As reported in our previous research (chapter 2 and 3), data about teacher's interpersonal role identity was collected with a video-stimulated interview (concerning teachers' appraisals of classroom situations) and a semi-structured interview (concerning teachers' interpersonal identity standard) in 2010/2011 and 2012/2013. Next to that, all teachers were asked in 2010/2011 and 2012/2013 to complete standardized and widely used questionnaires for personality (Quick Big Five; Goldberg, 1990), self-efficacy (OSTES; Tschannen-Moran & Woolfolk Hoy, 2001), burnout (UWES, Schaufeli et al., 1996), work engagement (UBES, Schaufeli & Bakker, 2003) and the importance of the interpersonal role (Beijaard et al, 2000). In this dissertation, self-efficacy, burnout and work engagement are perceived as aspects of teacher's wellbeing.

5.2.3 Instruments

Self-efficacy is defined as the extent to which a person believes that he or she has the capacity to affect desired outcomes (Brouwers & Tomic, 2000; Tschannen-Moran & Woolfolk Hoy, 2001). In this study, teachers' self-efficacy was measured with the validated and reliable Tschannen-Moral and Woolfolk Hoy short version of the Teachers Sense of Efficacy Scale which consists of three scales: Classroom Management, Student Engagement, and Instructional Strategies (Tschannen-Moran & Woolfolk Hoy, 2001; see Chapter 3).

Burnout is defined as "a prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach et al., 2001, p. 397) and consists of three scales: emotional exhaustion, cynicism/depersonalization, and individuals' feelings of reduced personal accomplishment (Brouwers & Tomic, 2000; see Chapter 3).

Work engagement is considered as the positive antipode of burnout, and is defined as a fulfilling state of mind in employees that is characterized by vigor, dedication, and absorption (Schaufeli, & Dierendonk, 2000; Chapter 3).

In this study, teachers' personality was measured using a shortened, reliable and validated version of the Big Five questionnaire (Gerris, Houtmans, Kwaaitaal-Roosen, Schipper, Vermulst, and Janssens, 1998; Vermulst & Gerris, 2005). This questionnaire contains 30 items with scales pertaining to one's extraversion, intellect, consciousness, friendliness, and emotional stability.

Burke and Stets (2009) argue that a person's professional identity consists of several occupational roles which may form a hierarchy or have different priority. Hence, it may be valuable to ascertain the importance of the interpersonal role compared to other roles. To do this, we use an instrument developed by Beijaard, Verloop and Vermunt (2000), which distinguishes between an interpersonal role, a role as subject matter-, didactical and organizational- or pedagogical expert. Each participant was asked to divide 100 points across these four teacher roles; a high number of points ascribes to a certain role indicates that this role is regarded relatively important.

5.3 Analysis

In order to combine and present the available data concerning (changes in) teachers' self-efficacy, burnout, work engagement, personality, the importance of the interpersonal role compared to other roles, appraisals of specific situations and interpersonal identity standards, a table was created with a complete overview of the main results for each participant (see Table 5.2). In addition, the interview data was analyzed for statements where respondents themselves described a (work related) change between 2011 and 2013. Each interview consisted of one statement concerning change or stability between 2011 and 2013. In case multiple statements were found, these were combined and considered as one statement. The statement related to change were coded both on the content of change (did the change occur in private or professional life, and if so; within or outside the classroom?), and on the initiator of change (who took the initiative that resulted in the change?). This resulted in two codes per respondent: one code for the content and one code for the initiator (change initiator or change acceptor).

In order to analyze the results, two steps were taken. In the first step separate scale scores were categorized as 'low'; 'average' or 'high' using the norm scores available from previous research (for work engagement: Schaufeli & Bakker, 2003; for burnout: Schaufeli & Dierendonck, 2000). For self-efficacy only an 'average' norm score was available, on which basis we constructed the other categories ('low' and 'high'). In a second step, results for the separate scale scores (summarized in the three categories low-average-high) for self-efficacy, burnout, and work engagement were combined in Table 5.2 into one score for each construct. The separate scale scores for the BIG 5 could not be combined, so that the scores for each aspect are reported separately. In order to characterize the importance of teachers' interpersonal role we scored as follows: 0-20 as low, 21-30 as average, and >30 as high. The appraisals scores for the three specific situations per participant were summarized into one appraisal score per participant.

5.4 Results

5.4.1 Characterizing the nature of change

Our participants were asked during the interview in 2013 whether they experienced a change (as compared to the first interview in 2011) in their interpersonal role identity (consisting of their interpersonal identity standard and their appraisals of specific classroom situations). From the interview data one major theme emerged. This theme pertained to the initiative to change from healthy mismatcher to healthy matcher. The role of the teachers took two forms in this respect: Teachers were either 'change initiators' (the experienced change was perceived as initiated by the teacher him/herself) or 'change acceptor/follower' (the change was perceived as initiated by someone else and/or the change "just happened" as one of the participants told). An overview of these characterizations can be found in the first two rows of Table 5.2 (change initiator/change acceptor). Half of the teachers saw themselves as change initiator, the other half of the teachers saw themselves as change initiator, the experienced change appeared to take place within themselves as persons (e.g., a personal decision about teaching in a specific way), for others changes came from the outside (e.g. as a result of changes in the curriculum or class sizes).

John, Peter, David, Jane and Adrian all mentioned that they initiated the change ('change initiator') towards healthy matcher. For John and Peter, and partly for Jane and Adrian, this change took place within themselves as teachers as a result of a personal decision or person circumstances (e.g., illness). John for instance stated: "Now I correct students faster than before, (...) I act immediately instead of letting it escalate or irritate me for a long time." Jane was a bit ambivalent about the change process, she can thus be characterized both as a change initiator as a change follower. For instance with respect to starting a lesson, she initiated a change: "I am better able to improvise, to give clear assignments (...) and to tell the students what I want them to do." On the other hand she indicated not to have taken measures herself to realize this change to a healthy matcher: "It is easier for me, since I know some of the students' names because some of the students are the same as last year, so I don't have to put energy in learning their names." David described his change by changing the focus of his work: "I used to get annoyed by

colleagues who are not keeping agreements, now I have found a way to deal with it and focus less on colleagues and more on the students in my class."

Charlotte can be seen as a change acceptor, meaning that she did not initiate her change. In Charlotte's case she was diagnosed with a severe lack of vitamin B12 a year after the first interview. During the second interview she explained her change as follows: "I was short tempered and forgot things. (...), after I got the medication it was getting better, it brought me some peace." For Joyce a similar story applied; she also got ill, which had an effect on her teaching. Patrick could be positioned as a change acceptor as well. He said: "Last year was difficult. I was assigned to teach 3 different subjects (Physics, Informatics and Science) to very different classes. Now, since one Physics teacher left our school, I am only assigned to teach one subject - Physics - which makes it easier."

Looking at Table 5.2, it appears that career phase did not seem to be related to whether a teacher could be labelled as change initiator or change acceptor: both novice teachers (John, Patrick, Jane, Peter) and experienced teachers (Joyce, Charlotte, David, Adrian) could be characterized in terms of both forms.

5

Table 5.2.

Overview per participant of norm scores in 2010/2011 and 2012/2013 for several variables

	Participants							
	John	Patrick	Joyce	Jane	Peter	Charlotte	David	Adrian
Change initiator	X			X	X		X	X
Change acceptor		X	X	X		X		
Self-efficacy	low→						low→	
	average						average	
Burnout	average→							
	low							
Work	average	X	average		X	X	average	X
engagement	→ high		→ high				→ high	
Personality	X	X	average	*		X	low→	
Extraversion			→ high				average	
Personality	X		high→		X		low→	
Friendlyness			average				average	
Personality	low→		high→				X	
Consciousness	average		average					
Personality	average→	X	low→		X	high→	average	X
Emotional	high		average			average	→ high	
stability								
Personality		X	X			X		X
Intellect								
Importance	low→		X		high→	high→		
interpersonal	average				low	average		
role								
Appraisal	changed							
Identity standard	changed	stable	changed	changed	stable	stable	changed	changed

Legend Table 5.2

*	Low score both in 2010/2011 and 2012/2013
	Average score both in 2010/2011 and 2012/2013
X	High score both in 2010/2011 and 2012/2013
	Increasing score between 2010/2011 and 2012/2013
	Decreasing score between 2010/2011 and 2012/2013

5.4.2 Factors that might influence change

Table 5.2 also depicts the other results on the variables of this study per teacher for both measurements (2010/2011 and 2012/2013). Change between both measurements is indicated with an arrow (\rightarrow) .

Looking at the data in Table 5.2, it appeared that the appraisal of classroom situations changed for all teachers. In contrast to our expectations based on theory (Burke & Stets, 2009), which suggest that identity standards not easily change, for five of the eight teachers (John, Joyce, Jane, David, Adrian) their interpersonal identity standard changed. Patrick, Peter and Charlotte were the only teachers with a stable interpersonal identity standard. Interestingly, both Patrick and Charlotte had a stable interpersonal identity standard and were categorized as being a 'change acceptor'. All the teachers who could be seen as 'change initiators', except Peter, changed their identity standard.

Five out of the eight teachers started with an average self-efficacy during the first measurement, whereas John, Patrick and David started with a low self-efficacy. Patrick was the only participant whose self-efficacy appeared to be 'low' during both the first and the second measurement. Patrick described his everyday teaching as follows: "I am still searching. [for the right way to approach students; authors]." The other teachers felt that they were "getting better at it" (Peter), or that "it gets easier" (Peter, Jane, David). John stated: "I have made a better start this year." It appeared that the participants whose self-efficacy increased (John and David) were both characterized as change initiators. These results might indicate that being a change initiator goes hand in hand with high(er) self-efficacy.

Looking at the factors self-efficacy, burnout, work engagement and intellect, we can conclude that all teachers in this study believed in their teaching capacity (self-efficacy, except enjoyed teaching (work engagement) and had an open mind to try out new things (Personality). The burnout scores for all teachers (except John) were average in both years and the work engagement scores of all participants were average or high. John's burnout score decreased from 'average' at the first measurement to 'low' at the second measurement. For Personality, 'Intellect', which includes openness to new ideas, was

average or high for all teachers. "I want to keep developing myself as a professional and try new things", Joyce said. However, a relation between burnout, work engagement and intellect on the one hand and being a change initiator or acceptor on the other could not be found.

The teachers differed in terms of 'extraversion' (Personality) and 'emotional stability' (Personality) and the importance of the interpersonal role. Some teachers appeared more extravert (John, Patrick, Charlotte), others less (Jane, David). Some teachers showed an increasing emotional stability (John, Joyce, David), others sored high on this aspect during both measurements (Patrick, Peter, Adrian). Only Charlotte's emotional stability decreased from high to average. There did not seem to be a relation between being a change initiator or change acceptor and the scores on extraversion or emotional stability.

Considering the importance of the interpersonal role it appeared that some teachers considered the interpersonal role to be very important at the first measurement and scored lower (Peter) or average (Charlotte) at the second measurement. Peter stated during the second measurement: "Now I know the things in the classroom concerning teaching the curriculum, I can focus on other things like being a good mentor for the students and knowing their personal background." For John, the importance of the interpersonal role increased. John stated: "The relationship with students is the basis, after which you can work on other things". There did not seem to be a relation between being a change initiator or change acceptor and the importance attached to the interpersonal role.

5.5 Conclusion & discussion

This study explored possible factors that might be related to changes in teachers' interpersonal role identity. The specific focus of this study was on teachers changing from healthy mismatchers towards healthy matchers. Although the factors were studied separately, the results show that some factors occur together. For instance, the results of this study indicated that teachers changing from healthy mismatchers towards healthy matchers experienced this change themselves, felt able to teach (average to high score on self-efficacy), enjoyed teaching (average to high score work engagement) and were open to learn new things (high intellect, Personality). The interpersonal role was not perceived by them as more important than other roles. All teachers changed their appraisals of specific classroom situations and many of them also changed their interpersonal identity standards to a certain degree. The question rises whether there is a causal relation between one factor and the other in the context of teachers' interpersonal role identity, for instance between a changing interpersonal identity standard and self-efficacy. This would be in line with research that views self-efficacy as an indicator of teacher professional identity (Canrinus et al., 2011). For teacher educators insight into the relation between the factors can be helpful to decide which factor should have their attention while working with student teachers and the development of student teachers' interpersonal role identity.

Irrespective of a teacher's ability to change his or her mismatch into a match, all teachers in our study reported that in 2010/2011 they realized that not everything went well concerning the teacher-student relationship. To be aware of the mismatch between your interpersonal identity standard and the appraisals of specific classroom situations and to realize that you are (at that moment) not the teacher you hoped or wanted to be, can be quite emotionally confronting and also an impetus for change (cf. Meijer, 2011). The study reported in this chapter might indicate that, in order to cope with such feelings and to continue teaching at the same time, teachers need to have some mental resources to cope with this, a kind of 'mental buffer zone' consisting for instance of high self-efficacy and high work engagement. This 'mental buffer zone' might perhaps be of help for teachers with a mismatch to continue teaching or, at least, try to change towards a better match.

In addition to previous research which has shown the importance of work engagement, self-efficacy and intellect (or: openness to learning new things, BIG 5) for

(student) teachers' wellbeing in general (Schepens et al., 2009; den Brok et al., 2013), our research indicates that these aspects might also be important when appraising specific situations during teachers' lessons. Our findings are furthermore supported by research of Chang and Davis (2009) on the relation between teachers' appraisal of situations of student misbehavior on the one hand and coping strategies, self-efficacy, and teacher burnout on the other (see also Chang, 2009).

Again, this study was very exploratory and the results must therefore be seen as only a first indication to be taken with care. Only eight teachers participated in this research with whom a limited number of two interviews were conducted at two different moments. It is unknown whether our study also applies to other types of changes in the interpersonal role identity and whether these eight participants will remain healthy matchers during their career. Furthermore, this study did not investigate whether the factors (for example, selfefficacy, work engagement, burnout, BIG 5) are of different importance for certain teachers or in certain phases of the career. More large-scale as well as in-depth longitudinal research on teachers' interpersonal role identity and factors that might influence change is needed to find out how different teachers in various phases of their career create a healthy matching interpersonal role identity and be supported with that. In further research, also other factors like for example 'types' of students, their backgrounds and school culture should be taken into account, since in the present study only a very limited number of factors were investigated. Future research is recommended that also studies a larger variety of appraisals of classroom situations next to the three used in this study and what the reasons are why some teachers do not change. Finally, future research can consist of an intervention study into the effects of a training for (student) teachers to stimulate the initiative to change. For this reason, it can be helpful to explore what makes some teachers initiate a change themselves. More research in this area can thus help to explore the field and meanwhile be helpful in supporting novice teachers to develop towards healthy matching teachers.

One of the implications of this study is related to teachers taking initiative towards their own professional development. The results of this study clearly show that not all teachers do this. Our study has shown that in case teachers do not take the initiative to change, schools can play a role by facilitating and supporting teachers to become healthy matchers.

The results of our study also show that all eight teachers (who have been selected from the larger sample of 24 teachers used in previous research) changed their appraisals of classroom situations and that five out of eight teachers also changed their interpersonal identity standard. Our findings are in line with the theory of Burke and Stets (2009) implying that teachers' appraisals of specific classroom situations changed more than their interpersonal identity standards. As our results indicated, identity standards tended to be more stable over time as compared to appraisals. This change in interpersonal identity standards could in all cases be characterized as a gradual or subtle change within the domain of the healthy interpersonal identity standards. It might thus be that interpersonal identity standards are relatively stable over time in the sense that they may mostly shift gradually. For that reason, it can be worthwhile for (student) teachers to explore their interpersonal identity standards next to the appraisals of specific situations. In line with Dicke, Schmeck, Elling, and Leutner (2013), we advise teacher educators to create time to talk about classroom management and to help student teachers to explicate their interpersonal contact related to themselves as teachers in interaction with students (interpersonal identity standard) and to evaluate specific classroom situations (appraisals). When (student) teachers are aware of the mutual relation of the interpersonal identity standard and the appraisal of classroom situations, they can actively work towards a healthy matching interpersonal role identity.

Chapter 6

Conclusions & discussion

6.1 Main findings and conclusions

Teachers' interpersonal role identity

In Chapter 2 an overview of the conceptual framework of teachers' interpersonal role identity was presented and illustrated with empirical data of 29 teachers. Semistructured and video-stimulated interviews were used to collect data about teachers' interpersonal identity standards and appraisals of specific classroom situations. The data was analyzed with the Teacher Interpersonal Circle. The results of this study showed a variety of interpersonal identity standards, although the majority of the teachers mentioned interpersonal identity standards that were coded as either steering or being friendly, or as both steering and being friendly. These standards are high on control and affiliation (in terms of the Teacher Interpersonal Circle) and can be regarded as healthy interpersonal identity standards. Concerning the affective appraisals, over 40% of the affective appraisals was benign-positive. Stressful affective appraisals were often found (over 30%) for the start of the lesson and for reacting to student misbehavior. Irrelevant appraisals referred often to a certain routine or to having experience with the situation such as asking a student to stop eating chewing gum, or starting the lesson by having students to get their books and related material on the table. Concerning the evaluative appraisal, teachers' responses were positioned at different places in the Teacher Interpersonal Circle: appraisals related to the categories 'steering' (high on control and affiliation), 'reprimanding' (high on control, low on affiliation), and 'accommodating' (low on control, high on affiliation) occurred most often. However, appraisals in the categories 'uncertain' (low on control and affiliation), 'dissatisfied' (low on control and affiliation), and 'enforcing' (high on control, low on affiliation) were also found. In a situation in which the interpersonal identity standard matched with the appraisal, interpersonal role identity verification occurred: appraisals of specific classroom situations by the teacher were consistent with his/her interpersonal identity standard. This was the case for 13 of the 29 teachers: their identity standards matched with their appraisals in most situations; thus, interpersonal role identity verification occurred. In other cases, however, this match was only partial (10 teachers) and sometimes there was no match at all (six teachers), or, in other words, a lack of identity verification. To conclude, the results showed that appraisals and interpersonal identity standards of teachers often did not (or only partially) match.

Changes in teachers' interpersonal role identity over time

Possible changes in the teachers' interpersonal role identity were studied in Chapter 3 by focusing on teachers' interpersonal identity standards and teachers' appraisals of specific situations in their classrooms and how these appraisals matched (or mismatched) with their interpersonal identity standards at two different moments in time with a period of two years in between. Semi-structured and video-stimulated interviews were conducted with 24 teachers in 2011 and 2013. The data concerning teachers' interpersonal identity standard and the evaluative appraisal was analyzed using the Teacher Interpersonal Circle. For 17 of the 24 teachers, the interpersonal identity standard changed towards a more healthy interpersonal identity standard, with either a higher level of control, a higher level of affiliation or a higher level of both. Regarding the evaluative appraisal of all three situations (start of the lesson, reacting to student misbehavior and reacting to positive student behavior), the results showed that one quarter of the participants did not change their evaluative appraisals. The evaluative appraisals that changed, showed an increase of the codes 'friendly' and a decrease of the codes 'uncertain', 'dissatisfied', 'reprimanding', and 'enforcing'. For the affective appraisal, a clear trend of change could be found which can be described as 'a change towards irrelevant affective appraisal'. Concerning the change in teachers' identity verification, for 13 teachers (mostly healthy matchers) no change was found. However, 8 teachers changed from healthy mismatchers to healthy matchers. This study also showed that some teachers changed both their interpersonal identity standards and their appraisals of specific classroom situations over time. This was also the case for experienced teachers who had been in the teaching profession for more than 20 years. To conclude, teachers who were healthy matchers were likely to stay healthy matchers over time. Teachers who were healthy mismatchers were able to change over time towards healthy matchers. Teachers – at least some of them - were thus able to overcome a lack of identity verification.

Teachers' interpersonal role identity and wellbeing

The relation between teachers' interpersonal role identity and teachers' wellbeing was reported in Chapter 4. Teachers' wellbeing was investigated using questionnaires about self-efficacy, burnout, and work engagement. We investigated this relationship by comparing three groups of participants: teachers with a healthy interpersonal identity standard and matching appraisals ('healthy matchers'); teachers with a healthy interpersonal identity standard with mismatching appraisals ('healthy mismatchers'); and teachers with an unhealthy interpersonal identity standard and either matching or mismatching appraisals ('unhealthy (mis)matchers'). Our expectation was that the three groups would differ in terms of self-efficacy, burnout, and work engagement.

Concerning self-efficacy, our expectations were confirmed. The results showed that teachers with a healthy match scored statistically significantly higher on instructional self-efficacy than the teachers with an unhealthy (mis)match and that teachers with a healthy match scored statistically significantly higher on instructional self-efficacy than teachers with a healthy mismatch.

For burnout, we expected that teachers with a matching interpersonal identity standard (matchers) would score lower on burnout scales than the teachers with a mismatching interpersonal identity standard, since matchers would have a more balanced interpersonal role identity and thus might feel more at ease while teaching. However, this was not confirmed by our results, as no differences were found between the three groups. The results showed a trend (not statistically significant) considering burnout scores: teachers from the healthy matchers group scored lower on burnout scales compared to teachers from the other two groups.

Regarding work engagement, a trend could be found with healthy matchers scoring higher than unhealthy (mis)matchers, meaning that teachers with a healthy interpersonal identity standard and matching appraisals might be more engaged in their work than teachers with unhealthy interpersonal identity standards. However, none of the differences between groups for the scales of work engagement were statistically significant.

The results indicate the importance of a healthy interpersonal identity standard and of matching appraisals of specific classroom situations for teachers' wellbeing, although the strength of this role differed somewhat for different aspects of wellbeing.

Factors possibly influencing the change of teachers' interpersonal role identity

We explored possible factors related to the change of teachers' interpersonal role identity in chapter 5. Data of eight teachers who experienced a change concerning their interpersonal role identity over time were analyzed. More specifically, the 8 teachers that changed from healthy mismatcher (i.e., their interpersonal identity standard was healthy but did not match with appraisals of classroom situations) into healthy matcher (i.e., their interpersonal identity standard was healthy and matched with appraisals of classroom situations).

The results of this study indicated that teachers changing from healthy mismatchers into healthy matchers experienced this change themselves, felt able to teach (average to high score on self-efficacy), enjoyed teaching (average to high score on work engagement), and were open to learn new things (high intellect, BIG 5). All teachers changed their appraisals of specific classroom situations and five of them also changed their interpersonal identity standards to a certain degree. This change in interpersonal identity standards could in all cases be characterized as a gradual or subtle change within the domain of the healthy interpersonal standards. The results of this study further showed that not all teachers took the initiative towards change concerning their interpersonal role identity. In some cases, changes in the environment, such as being assigned to similar classes, could also lead to change.

6.2 Discussion of the main results

The identity theory as described by Burke and Stets (2009) appeared to be useful as a framework to study and analyze teachers' interpersonal role identity via its two elements, namely teachers' appraisals of specific classroom situations and their interpersonal identity standard. By focusing on one role identity of teachers, i.e., teachers' interpersonal role identity, it was possible to study this role in more detail. The in-depth study of the interpersonal role identity enabled us to gain detailed insight in manifestations of the interpersonal role identity in specific classroom situations. Studying teachers' appraisals of these situations and how these are connected with their more overarching interpersonal identity standards may result in more detailed understanding of a teacher's professional identity.

Concepts studied in this dissertation such as (the degrees of) 'identity verification' or the categorization of certain kinds of identity standards (healthy vs unhealthy) can also be transferred to the study of teachers' professional identity in general and to other role identities of teachers. Next to that, questions that came to the fore in this study on interpersonal role identity are also relevant for professional identity in general. For instance, the concept of (interpersonal) identity verification is relevant since it gives rise to the question whether identity verification should take place in every situation for every teacher, or whether the lack of identity verification can also be an impetus for learning. What is the 'right' or desired (interpersonal) role identity or professional identity in general?

Our research indicates that teachers appraise certain classroom situations (i.e., the start of the lesson or reacting to positive student behavior) different than other classroom situations (i.e., reacting to student misbehavior). These findings are in line with previous research concerning the three situations (the start of the lesson, reacting to student misbehavior, reacting to positive student behavior) that we used in this dissertation (e.g., Admiraal et al., 1996; Wubbels et al., 2006).

The research presented in this dissertation has shown that teachers' appraisals of the three situations differed per situation for both the affective as well as the evaluative appraisals (cf. Chapter 2). *Stressful* affective appraisals were often (for 16 out of 29 teachers) found for reacting to student misbehavior. *Benign-positive* affective appraisals were most often (for 22 out of 25 teachers) found for reacting to positive student behavior. If a teacher

had a stressful affective appraisal, one would expect the majority of the evaluative appraisals to reflect some stress as well. One would expect the evaluative appraisals to be coded as uncertain, dissatisfied, reprimanding, and enforcing (cf. Wubbels et al., 2006), which was the case for the appraisal of student misbehavior, but not for the start of the lesson. The start of the lesson had a variety of evaluative appraisals in which all eight categories occurred. An interesting question for future research would be to explore whether certain classroom situations vary in significance for their interpersonal identity standards.

In this dissertation, the Teacher Interpersonal Circle (Wubbels et al., 2006) was used to analyze the evaluative appraisals of specific classroom situations and the interpersonal identity standards. Previously, the Teacher Interpersonal Circle (Wubbels et al., 2006) has been used to study teacher-student relationships from a *behavioral* perspective. In this dissertation, the Teacher Interpersonal Circle has been used from an identity perspective. As a result, teachers' interpersonal role identity could be visualized more precisely and be described, discussed and compared with those of other teachers, yet allowing for distinct differences, richness and uniqueness of individual teachers.

Our research has shown that both teachers' appraisals of specific classroom situations and their interpersonal identity standards can change (Chapter 4). The results of our study showed that three out of four experienced teachers' interpersonal identity standards changed (Chapter 5). This is in contrast with previous cross-sectional research on teacher-student relationships across the teaching career which shows that experienced teachers' *self-* and *ideal perception* of their teacher-student relationship did not change (much) (Wubbels et al., 2006). A case study research by Veldman et al. (2012) showed that changes in experienced teachers' appreciation of their teacher-student relationship were diverse; some teachers' relationships with their students changed enormously due to different tasks, personal circumstances (illness) or educational reforms, while other teachers' relationships with their students remained stable.

From a role identity perspective, Beijaard (1995) showed that for 50-57% of the experienced teachers that participated in his study, results regarding getting respect of students and having respect for students remained stable during their career. Teachers' bond and interaction with students was found to increase during the career in the same study. In short, there is no consensus about whether the teacher-student relationship of

experienced teachers changes. Some studies (Veldman et al., 2012; Beijaard, 1995) suggest that experienced teachers' change is caused by personal factors or external circumstances, which also might have played a role in the change process of our experienced teachers.

An important part of this dissertation was related to a *lack of identity verification*. The results of the study showed that for 6 out of 29 teachers no identity verification occurred for any situation (Chapter 2). According to Burke and Stets (2009), identity verification is needed since people experience stress if this is not the case. Our results showed that teachers with no identity verification, in this dissertation referred to as 'mismatchers', left the profession in larger numbers as compared to matchers (4 mismatchers left, 1 matcher; Chapter 3). Mismatchers had lower scores on scales related to teacher wellbeing (Chapter 4), which is related to teacher stress (Spilt et al, 2011). However, a lack of identity verification can also be seen as an opportunity to reflect upon a situation and reappraise that situation and/or to reconsider the interpersonal identity standard (Chapters 4 and 5). Therefore, a lack of identity verification can be perceived as an opportunity to grow. Some teachers in our study took the initiative to change, in other cases changes in the environment, such as being assigned to similar classes, could also lead to change (Chapter 5).

6.3 Strengths, limitations and suggestions for further research

In this dissertation, both the interpersonal identity standard as well as the appraisal were studied using a semi-structured interview and a video-stimulated interview. Appraisals were studied – instead of vignettes- using situations from the video-taped lesson of the teacher, which enabled us to map the affective and evaluative appraisals of teachers in their own teaching situation.

An in-depth approach was chosen to study teachers' interpersonal role identity. This enabled us, combined with our longitudinal perspective, to gain insights into the complex concept of teachers' interpersonal role identity. Therefore the number of teachers (n=29) participating in this study was small and the number of situations used for the appraisal limited (3 situations). The relationship between teachers' interpersonal role identity and wellbeing was explored without studying the nature of the relationship

(Chapter 4). The reasons for the change in teachers' interpersonal role identity were only studied for one kind of change (the change from healthy mismatch to healthy match) and the number of factors possibly related to the change in teachers' interpersonal role identity (Chapter 5) was limited. For further research we recommend to include more of the same situations (the start of the lesson, reacting to student misbehavior, reacting to positive student behavior) in different contexts (classes, age of students, educational level) to study the variety in a teacher's appraisals. Since our research has shown that some situations differ in their association with interpersonal identity standards, the inclusion of different contexts can contribute to the understanding of the variations between appraisals of situations. In turn, this will lead to a more nuanced picture of teachers' appraisals and their identity verification.

Another interesting question for future research is the question to what extent a mismatch - a lack of identity verification - can be helpful for teacher learning. What will happen when this lack of identity verification is not noticed by the teacher as an opportunity to grow or when the teacher does not manage to reduce the lack of identity verification? In such a case, the teacher might, for example, try to compensate the mismatch in the interpersonal role identity by emphasizing the match in other role identities. Riley (2009) addressed the possible avoidance reactions of teachers during classroom management difficulties. Avoidance can result in a teacher focusing on other roles and by doing so trying to 'compensate' for the interpersonal role. A teacher might attempt to rationalize the lack of identity verification or attribute difficulties to external factors so that the lack of identity verification becomes a given part of the teaching profession for this respective teacher.

Teachers' interpersonal identity standards were in this study defined as the perceived interpersonal frame of reference, without including the ideal interpersonal frame of reference as is done by Burke and Stets (2009). If the ideal interpersonal frame of reference was included, the results might be different, for instance concerning unhealthy matchers; it is unlikely that someone has an ideal teacher-student relationship which entails being uncertain, dissatisfied and reprimanding. Including the ideal interpersonal frame of reference in future research would be valuable to explore the relation with motivation for the profession, attrition or wellbeing in the long run.

6

Teachers' interpersonal identity standards were studied based on one semi-structured interview concerning the interpersonal identity standard per participant for 2011 and for 2013. This enabled us to interview 29 teachers. However, the question arises whether someone's interpersonal identity standard can be measured during one interview. There were two measurements in time, so that no development could be detected from the data, only change. For example, one interview every three months during two school years might give another and more detailed picture of a teacher's interpersonal identity standard. Future research should include a methodological study on teachers' interpersonal identity standards of a small number of participants (for instance 5-10 teachers) in order to get information about the reliability and validity of the measurement of teacher interpersonal identity standard and the development of teacher interpersonal identity standard over time. This could also include a focus on the individual changes in teachers' interpersonal identity standards.

A teacher has several roles to enact while teaching, varying from being a subject matter expert to an interpersonal expert who interacts and builds a relationship with students (Chapter 1). The result of the meanings a teacher attributes to him/herself regarding a particular role is called one's role identity (Burke & Stets, 2009). In this dissertation, we studied one of the role identities of the teacher, the interpersonal role identity. This allowed us to explore this interpersonal role identity in-depth, study its two elements (appraisal and identity standard) and the changes over time. In addition, we were able to explore the relation between teacher interpersonal role identity and teacher wellbeing. For future research we recommend to study the relation between interpersonal role identity and teacher wellbeing using a larger sample size in order to measure the causality of this relation. However, this dissertation did not study other role identities such as the subject matter role identity, the didactical role identity or the pedagogical role identity. Beijaard, Verloop, and Vermunt (2000) used a questionnaire to study teachers' perceptions of their professional identity using the three roles (subject matter expert, didactical expert, pedagogical expert). They argued for future research to use other methods to explore possible relationships between the roles and possible influencing factors. Following Beijaard et al. (2000), opportunities for further research include combining the interpersonal role identity with other role identities of teachers. This could give in-depth

insight into the relation between the role identities as compared to the questionnaire about the different role identities we used in this dissertation.

6.4 Implications for practice

The findings presented in this dissertation have implications for practice. First, in line with Dicke, Schmeck, Elling and Leutner (2013), we advise teacher educators to create time to talk about classroom management in order for student teachers to reduce stress. Second, we recommend that teacher educators help student teachers to explicate their interpersonal role identities and to analyze their relationship with students (interpersonal identity standard) and to evaluate specific classroom situations (appraisals).

The instruments used in this study could be helpful in this respect. The respondents in this research were very willing to participate in this research and expressed the value of the instruments used. And as such, instruments that enable students to investigate their own interpersonal role identity are currently lacking in teacher education. Investing time to discuss classroom management can also be helpful for more experienced teachers with a mismatching interpersonal role identity, because our research has shown that teachers from all career phases can change both their identity standards as well as their appraisals.

To illustrate how (student) teachers can actively develop their interpersonal role identity, in the following section we describe a possible assignment, the so-called *Match Maker Analysis*. In this *Match Maker Analysis* the teacher is the 'Match Maker:' Based on our research we believe that a teacher's agency or initiative is important to become aware of his/her interpersonal role identity. The analysis consists of three steps, which are described below.

1. *Identity standard*. As a first step of match making, the teacher - as Match Maker - should start with mapping his/her interpersonal identity standard. This can be explored in written or spoken form, but also in more creative or metaphoric ways. After exploration, the interpersonal identity standard is shared with and questioned by other (student) teachers to help the teacher to grasp the core of his/her interpersonal identity standard. Then, the Teacher Interpersonal Circle (Wubbels

et al., 2006) can be used to categorize or position teachers' interpersonal identity

- 2. Appraisal of classroom situations. After mapping his/her interpersonal identity standard, the teacher should share situations supported by video-material with others and appraise these situations, supported by other teachers or teacher educators who ask clarifying questions (for instance the questions used in the semi-structured interview reported in Chapter 2). When the appraisals of several specific classroom situations have been shared and discussed, the teacher can position them in the Teacher Interpersonal Circle as well.
- 3. Match making / Identity verification. The previous steps will result in a visual overview of a teacher's interpersonal role identity, whether matching or mismatching. This overview can then be used by the teacher being the match maker to analyze whether there is a match or not and to think about and discus which steps (s)he can take (for instance working on the appraisal of the start of the lesson, or the interpersonal identity standard) to make the match. This will give teachers concrete tools to become aware of their interpersonal role identity and enable them to work towards a match.

The study on teacher's interpersonal role identity has resulted in a theoretical framework and provided a 'language' to discuss one of the crucial role identities of the teacher: the interpersonal role. The Match Maker Analysis might be seen as the 'product' of this research for the teaching practice, a tool that teacher educators and coaches in schools can use for supporting (student) teachers to (further) develop or change their interpersonal role identity.

References

- Admiraal, W. F. (1994). Reacties van docenten op aandachtseisende situaties in de klas. [teachers responses to daily hassles in the classroom] Dissertation. Universiteit Utrecht.
- Admiraal, W. F., Korthagen, F. A., & Wubbels, T. (2000). Effects of student teachers' coping behavior. *The British journal of Educational Psychology*, 70, 33-52.
- Admiraal, W. F., Wubbels, T., & Korthagen, F. (1996). Student teacher behavior in response to daily hassles in the classroom. *Social Psychology of Education*, 1, 25-46.
- Arnold, M. B. (1960). *Emotion and personality*. New York, NY: Columbia University Press. University.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.
- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: an overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175-189.
- Beijaard, D. (1995). Teachers' Prior Experiences and Actual Perceptions of Professional Identity. *Teachers and Teaching: theory and practice*, 1(2), 281-294.
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20(2), 107-128.
- Beijaard, D., Verloop, N., & Vermunt, J. D. (2000). Teachers' perceptions of professional identity: an exploratory study from a personal knowledge perspective. *Teaching and Teacher Education*, 16, 749-764.
- Belfi, B., Goos, M., de Fraine, B., & van Damme, J. (2012). The effect of class composition by gender and ability on secondary school students' school wellbeing and academic self-concept: A literature review. *Educational Research Review*, 7(1), 62-74.
- Brok, P., den, Brekelmans, M., & Wubbels, T. (2004). Interpersonal teacher behavior and student outcomes. *School Effectiveness and School Improvement*, 15(3/4), 407-442.
- Brok, P., den, van Tartwijk, J., Wubbels, T., &Veldman, I. (2010). The differential effect of the teacher-student interpersonal relationship on student outcomes for students with different ethnic backgrounds. *British Journal of Educational Psychology*, 80, 199-221.
- Brok, P. J. den, Want, A. C. van der, Beijaard, D. & Wubbels, T. (2013). The interpersonal dimension in the classroom: A model of teachers' interpersonal role identity, appraisal and teacher-student relationships. In A. Gallant & M. Newberry (Eds.), *Emotion and school: Understanding how the hidden curriculum influences relationships, leadership, teaching, and learning* (pp.141-159). Bingley: Emerald Group Publishing.
- Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education*, 16, 239-253.

- Burke, R. J., Greenglass, E. R., & Schwarzer, R. (1996). Predicting teacher burnout over time: Effects of work stress, social support, and self-doubts on burnout and its consequences. *Anxiety, Stress, and Coping: An International Journal*, 9(3), 1-15.
- Burke, P. J., & Stets, J. E. (2009). *Identity Theory*. New York: Oxford University Press.
- Cano-Garcia, F. J., Padilla-Munoz, E. M., & Carrasco-Ortix, M. A. (2005). Personality and contextual variables in teacher burnout. *Personality and Invidual Differences, 38*(4), 929-940.
- Canrinus, E. T., Helms-Lorenz, M., Beijaard, D., Buitink, J., & Hofman, A. (2011). Self-efficacy, job satisfaction, motivation and commitment: exploring the relationships between indicators of teachers' professional identity. *European Journal of Psychology of Education*, 27(1), 115-132.
- Chang, M.-L. (2009). An appraisal perspective of teacher burnout: examining the emotional work of teachers. *Educational Psychology Review*, 21(3), 193-218.
- Chang, M., & Davis, H. (2009). Understanding the role of teacher appraisals in shaping the dynamics of their relationships with students: deconstructing teachers' judgments of disruptive behavior/students. In P. A. Schutz & M. Zembylas, Eds. *Advances in teacher emotion research: the impact on teachers' lives* (pp.73-94 / 95-128). Boston (USA): Springer US.
- Claessens, L. C. A.; Pennings, H. J. M., Want, A. C., van der, Brekelmans, M., Brok, P., den, Tartwijk, J., van. (2014). De docent en het sociale klimaat in de klas: Een exploratieve studie naar verschillende aspecten van docent-leerling relaties. [Teacher and social class climate: An explorative study of different aspects of the teacher-student relationship]. *Pedagogische Studiën*, 91(5), 302-317.
- Cohen, D. (1988). Statistical power analysis for the behavioral sciences. New Jersey: Lawrence Erlbaum Associates.
- Day, C., & Gu, Q. (2007). Variations in the conditions for teachers' professional learning and development: sustaining commitment and effectiveness over a career. Oxford Review of Education, 33(4), 423-443.
- Day, C., Sammons, P., Kington, A., Gu, Q., & Stobart, G. (2006). Methodological synergy in a national project: The VITAE story. *Evaluation & Research in Education*, 19(2), 102-125.
- Dicke, T., Schmeck, A., Elling, J., & Leutner, D. (2015). Reducing reality shock: Longitudinal effects of a classroom management skills training on pre-service teachers' wellbeing, *Teaching and Teacher Education*, 48, 1-12.

- Eder, F. (1995). Das Befinden von Kindern und Jugendlichen in der Schule. Bildungsforschung des Bundesminsteriums für Unterricht und kulturelle Angelegenheiten. [Wellbeing of childrend and youth in schools. Pedagogy for teaching and cultural activities] Innsbruck: STUDIEN-Verlag.
- Eder, F. (2002). Unterrichtsklima und Unterrichtsqualität [Teaching climate and teaching quality]. *Unterrichtswissenschaft 30*(3), 213-229.
- Engels, N., Aelterman, A., Petegem, K. van, & Schepens, A. (2004). Factors which influence the wellbeing of pupils in Flemish secondary schools. *Educational Studies*, 30(2), 127-143.
- Ensley, M. R. (2006). Expertise and situation awareness. In K. A. Ericsson, N. Charness, P. J. Feltovich, R. R. Hoffman (Eds.), *The Cambridge handbook of expertise and expert performance* (pp. 633-652). Cambridge: Cambridge University Press.
- Erdle, S., Murray, H. G., & Rushton, J. P. (1985). Personality, classroom behavior, and student ratings of college teaching effectiveness: A path analysis. *Journal of Educational Psychology*, 77(4), 394-407.
- Evertson, C., & Weinstein, C., (Eds.) (2006). *Handbook of classroom management: research, practice, and contemporary issues.* (pp. 3-16). Mahwah (USA): Lawrence Erlbaum Associates.
- Fabrigar, L. R., Visser, P., & Browne, M. W. (1997). Conceptual and methodological issues in testing the circumplex structure of data in personality and social psychology. *Personality and Social Psychology Review*, 1, 184-293.
- Friedman, I. A. (2006). Classroom management and teacher stress and burnout. In C. Evertson & C. Weinstein (Eds.), *Handbook of classroom management: research, practice, and contemporary issues*, (pp. 925-944). Mahwah: Lawrence Erlbaum Associates.
- Gerris, J. R. M., Houtmans, M. J. M., Kwaaitaal-Roosen, E. M. G., Schipper, J. C., Vermulst, A. A., & Janssens, J. M. A. M. (1998). *Parents, adolescents and young adults in Dutch families: A longitudinal study*. Nijmegen: Institute of Family Studies.
- Gold, Y., & Roth, R. A. (1993). Teachers managing stress and preventing burnout: the professional health (PH) solution. London: Psychology Press.
- Goldberg, L. R. (1990). An alternative "description of personality". The Big Five factor structure. *Journal of Personality and Social Psychology*, 59, 1216-1229.
- Granic, I., & Hollenstein, T. (2003). Dynamic systems methods for models of developmental psychopathology. *Development and Psychopathology*, 15(3), 641-669.
- Hargreaves, D. (1980) The occupational culture of teachers. In P. Woods (Ed.), *Teacher Strategies: Explorations in the sociology of the school*, (pp. 125-148). London: Croom Helm.
- Hong, J. Y. (2010) Pre-service and beginning teachers' professional identity and its relation to dropping out of the profession. *Teaching and Teacher Education*, 26, 1530-1543.
- Horowitz, M. L., & Strack, S. (2011). Handbook of interpersonal psychology. New York: Wiley.
- Hultell, D., Melin, B., & Gustavsson, J. P. (2013). Getting personal with teacher burnout: A longitudinal study on the development of burnout using a person-based approach. *Teaching and Teacher Education*, 32, 75-86.

- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational leadership*, 60(8), 30-33.
- Jong, R. J. de, Tartwijk, J. van, Wubbels, T., Veldman, I., & Verloop, N.(2012). Teachers' expectations of teacher-class interaction: complementary and distinctive expectancy patterns. *Teaching and Teacher Education*, 28, 948-956.
- Koomen, H. M. Y., Verschueren, K., Schoten, E. van, Jak, S., & Pianta, R. C. (2012). Validating the student-teacher relationship scale: testing factor structure and measurement invariance across child gender and age in a Dutch sample. *Journal of School Psychology*, 50, 215-234.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York: Springer Publisher Company.
- Macdonald, D. (1999). Teacher attrition: a review of literature. *Teaching and Teacher Education*, 15, 835-848.
- McCall, G. J., & Simmons, J. L. (1978). *Identities and interactions*. New York, NY: Free Press
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual review of psychology*, 52, 397-422.
- Meijer, P. C. (2011). The role of crisis in the development of student teachers' professional identity. In A. Lauriala, R. Rajala, H. Ruokamo, & O. Ylitapio-Mäntylä (Eds.), In *Navigating in educational contexts: identities and cultures in dialogue*, (pp.41-54), Rotterdam/Boston/Taipei: Sense Publishers.
- Meyer, D. K. (2009). Entering the emotional practices of teaching. In P. A. Schutz & M. Zembylas, Eds. *Advances in teacher emotion research: the impact on teachers' lives* (pp.73-94). Boston (USA): Springer US.
- Murray, H. G., Rushton, J. P., & Paunonen, S. V. (1990). Teacher personality traits and student instructional ratings in six types of university courses. *Journal of Educational Psychology*, 82(2), 250-261.
- O'Connor, K. E. (2008). "You choose to care": Teachers, emotions and professional identity. *Teaching and Teacher Education*, 24, 117-126.
- Pennings, H. J. M., van Tartwijk J., Wubbels, T., Claessens, L. C. A., van der Want, A. C., & Brekelmans, M. (2014) Real-time teacher-student interactions: A dynamic systems approach. *Teaching and Teacher Education*, *37*, 183-193.
- Petegem, K., van, Creemers, B. P. M., Rosseel, Y., & Aelterman, A. (2005). Relationships between teacher characteristics, interpersonal teacher behavior and teacher wellbeing. *Journal of Classroom Interaction*, 40(2), 34-43.
- Pillen, M., Beijaard, D., & Brok, P., den. (2013a). Tensions in beginning teachers' professional identity development, accompanying feelings and coping strategies. *European Journal of Teacher Education*, 36(3), 240-260.
- Pillen, M. T., Brok, P., den, & Beijaard, D. (2013b). Profiles and change in beginning teachers' professional identity tensions. *Teaching and Teacher Education*, 34, 86-97.
- Riley, P. (2009). An adult attachment perspective on the student-teacher relationship and classroom management difficulties. *Teaching and Teacher Education*, 25, 626-635.

- Riley, P., Watt, H. M. G., Richardson, P. W., & Alwis, N., de. (2012). Relations among beginning teachers' self-reported aggression, unconscious motives, personality, role stress, self-efficacy and burnout. In T. Wubbels, P. den Brok, J. van Tartwijk, & J. Levy (Eds.), *Interpersonal relationships in education: An overview of contemporary research* (pp. 151-166). Rotterdam: SENSE Publishers.
- Schaufeli, W. B., Daamen, J., & van Mierlo, H. (1994). Burnout among Dutch teachers: An MBI-validity study. *Educational and Psychological Measurement*, *54*, 803-812.
- Schaufeli, W. B., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). MBI-General Survey. In C. Maslach, S. E. Jackson, & P. Leiter, (Eds.). *Maslach Burnout Inventory manual* (3rd ed., pp.19-26). Palo Alto (USA): Consulting Psychologists Press.
- Schaufeli, W., & Bakker, A. (2003). UWES: Utrecht Work Engagement Scale. Utrecht, Utrecht University.
- Schaufeli, W., & Dierendonck, D. van. (2000). *Utrechtse Burnout Scale Manual*. Utrecht, Utrecht University.
- Schaufeli, W., Shimazu, A., Taris, T., (2009). Being driven to work excessively hard: the evaluation of a two factor measure of workaholism in the Netherlands and Japan. *Cross-Cultural Research*, 43(4), 320-348.
- Schepens, A., Aelterman, A., & Vlerick, P. (2009). Student teachers' professional identity formation: between being born as a teacher and becoming one. *Educational Studies*, 35(4), 361-378.
- Scherer, K. R, Schorr, A., and Johnstone, T. (Eds.). (2001). *Appraisal processes in emotion: theory, methods, research*. New York, Oxford University Press.
- Schutz, P. A., & Zembylas, M., Eds. (2009). Advances in teacher emotion research: The impact on teachers' lives. Boston, MA: Springer US.
- Sikes, P. J., Measor, L., & Woods, P. (1985). Teacher careers and identities. In P. Woods (Ed.), *Teachers careers. Crises and continuities* (pp.227-244). London: Farmer Press.
- Spilt, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). *Teacher wellbeing: The importance of teacher-student relationships.* Final report review study NWO PROO, no 411-08-502. The Hague: NWO, 1-45).
- Stryker, S. (1980). Symbolic interactionism: A social structural version. Menlo Park: Benjamin Cummings.
- Tartwijk, J., van, Brekelmans, M., Wubbels, T., Fisher, D. L., & Fraser, B. J. (1998). Students perceptions of teacher interpersonal style: The front of the classroom as the teacher's stage. *Teaching and Teacher Education*, 14, 1-11.
- Tatar, M., & Horenczyk, G. (2003). Diversity-related burnout among teachers. *Teaching and Teacher Education*, 19(4), 397-408.
- Thelen, E., & Smith, L. (2006). Dynamic systems theories. In W. Damon, & R. Lerner (Eds.), *Theoretical models of human development: Vol. 1. Handbook of child development* (pp. 258-311). New York: Wiley.
- Tschannen-Moran, M., & Woolfolk Hoy, A. W. (2001). Teacher efficacy: capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783-805.

- Veenman, S. A. M. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, *54*, 143-178.
- Veldman, I., van Tartwijk, J., Brekelmans, M., & Wubbels, T. (2013). Job satisfaction and teacher-student relationships across the teaching career: Four case studies. *Teaching and Teacher Education*, 32, 55-65.
- Vermulst, A. A., & Gerris, J. R. M. (2005). *QBF: Quick Big Five Persoonlijkheidstest Handleiding*. [Quick big five personality test manual], The Netherlands: LDC Publications.
- Volkmann, M. J., & Anderson, M. A. (1998). Creating professional identity: dilemmas and metaphors of a first-year chemistry teacher. *Science Education*, 82(3), 293-310.
- Want, A. C., van der, Brok, P., den, Beijaard, D., Brekelmans, M. Claessens, L. C. A., & Pennings, H. J. M. (2014). Teachers' Interpersonal Role Identity, *Scandinavian Journal of Educational Research*. Advance online publication. Doi: 10.1080/00313831.2014.904428.
- Wubbels, T, & Brekelmans, M. (2005). Two decades of research on teacher-student relationships in class. *International Journal of Educational Research*, 43, 6-24.
- Wubbels, T., Brekelmans, M., Tartwijk, J., van & Brok, P. den (2006). An interpersonal perspective on classroom management in secondary classrooms in the Netherlands. In C. Evertson & C. Weinstein (Eds.), *Handbook of classroom management: research, practice, and contemporary issues* (pp.1161-1191). New York: Lawrence Erlbaum Associates.
- Wubbels, T., Brekelmans, M., den Brok, P., Levy, J., Mainhard, T., & van Tartwijk, J. (2012). Let's make things better. In T. Wubbels, P. den Brok, J. van Tartwijk & J. Levy (Eds.), *Interpersonal relationships in education: An overview of contemporary research* (pp.225-250). Rotterdam: SENSE Publishers.
- Wubbels, T., Créton, H. A., & Hooymayers, H. P. (1985). Discipline problems of beginning teachers, interactional teacher behavior mapped out. Abstracted in *Resources in Education*, 20(12), 153. ERIC document 260040

Summary Teachers' Interpersonal Role Identity

Positive relationships with students are important for teachers in all phases of their professional career. Teachers interact with students every day and give meaning to these interactions in relation to themselves as professionals. Relationships with students are at the core of teachers' professional identity and have a strong impact on their wellbeing, attrition in the beginning and stress later in their career. In this dissertation, we focused on the meaning teachers give to their relationship with students in the classroom, referred to as *teachers' interpersonal role identity*.

Not much is known about how teachers give meaning to their interactions with students in specific classroom situations (appraisals) and whether this process of meaning making relates to their interpersonal frame of reference (interpersonal identity standard). In addition, it is unknown whether teachers' interpersonal role identity (or one of the elements of this role identity: appraisal or interpersonal identity standard) changes over time and which factors may possibly influence such a change. Little is known about the consequences of having a (mis)matching interpersonal identity standard and appraisal of specific classroom situations.

It is argued that people without a match may experience stress and therefore try to have a matching interpersonal identity standard and appraisal of specific situations, but empirical evidence for this in the context of teaching is scarce. Insight into these processes may be helpful for (beginning) teachers to become aware of and reflect upon the separate elements of their interpersonal role identity. Teacher educators can support (beginning) teachers to work actively towards a more or better matching between both the elements and thus improving the teachers' interpersonal role identity. In addition, the concept of teachers' interpersonal role identity can be helpful for teacher educators since it combines two important concerns of teachers in the beginning of their career: teacher professional identity (who am I as a teacher) and interpersonal relationships (what kind of relationship do I as a teacher want with my students?). The concept of teachers' interpersonal role identity offers a concept and a practical tool to work on identity development and classroom management beliefs simultaneously.

Therefore, the central question to be answered in this study was: How do teachers' interpersonal role identities manifest themselves in teachers' interpersonal identity standards and in their appraisal of classroom situations?

The following more specific questions to be answered in this dissertation were:

- (1) How do teachers appraise specific classroom situations and how is this related to their interpersonal identity standard? (Chapter 2)
- (2) How does teachers' interpersonal role identity change over a period of two years? (Chapter 3)
- (3) How does teacher wellbeing in terms of self-efficacy (a), burnout (b), and work engagement (c), differ between healthy matching teachers, healthy mismatching teachers and unhealthy (mis)matching teachers? (Chapter 4)
- (4) Which factors affect the change of teachers' interpersonal role identity? (Chapter 5)

In Chapter 2 an overview of the conceptual framework of teachers' interpersonal role identity was presented and illustrated with empirical data of 29 teachers. Semi-structured and video-stimulated interviews were used to collect data about teachers' interpersonal identity standards and appraisals of specific classroom situations. In this study, three classroom situations were used to elicit appraisals. These classroom situations were the start of the lesson, reacting to student misbehavior, and reacting to positive student behavior. In previous research, all three classroom situations have been found to be important with respect to the teacher-student interpersonal relationship (Admiraal, 1994; Admiraal et al., 1996; Wubbels et al., 2006).

For the appraisals of specific classroom situations, a distinction was made between the affective appraisal (with three categories: irrelevant/benign-positive/stressful) and the evaluative appraisal. The data of teachers' interpersonal identity standards and evaluative appraisals was analyzed with the Teacher Interpersonal Circle. The Teacher Interpersonal Circle consists of two dimensions: (1) the control dimension representing the degree of control/influence the teachers has (as experienced by the students) when interacting with students, and (2) the affiliation dimension representing the degree of cooperation between the teacher and the students (as experienced by students). The two dimensions divide behaviors into eight different interpersonal categories depending on different combinations

of the level of control and affiliation dimensions: (1) steering (e.g., lead, set tasks), (2) friendly (e.g., assist, make a joke), (3) understanding (e.g., listen with interest, show confidence), (4) accommodating (e.g., give freedom and responsibility), (5) uncertain (e.g., apologize, wait and see what happens), (6) dissatisfied (e.g., show dissatisfaction, criticize), (7) reprimanding (e.g., forbid, correct), and (8) enforcing (e.g., be strict, keep reins tight).

Two kinds of interpersonal identity standards were distinguished: healthy and unhealthy interpersonal identity standards. Healthy interpersonal identity standards (e.g., being steering, friendly, understanding) are negatively related to teachers' stress and positively related to student outcomes and can be described as having a high level of control combined with a high level of affiliation in terms of the Teacher Interpersonal Circle. Unhealthy interpersonal identity standards (e.g., being uncertain, dissatisfied, reprimanding) are positively related to teachers' stress and negatively related to student outcomes and can be described as having a low level of control combined with a low level of affiliation.

The results of this study showed a variety of interpersonal identity standards, although the majority of the teachers mentioned interpersonal identity standards that were coded as either steering or being friendly, or as both steering and being friendly. These standards are high on control and affiliation (in terms of the Teacher Interpersonal Circle) and can be regarded as healthy interpersonal identity standards. Concerning the affective appraisals, over 40% of the affective appraisals was benign-positive. When elaborating this benign-positive appraisal, respondents mentioned that the situation was as they expected or hoped it to be, for instance concerning students being on task and participating lively in a discussion. Stressful affective appraisals were often found (over 30%) for the start of the lesson. Especially novice teachers mentioned that they felt unprepared when the students entered the classroom and that they did not know where to sit or stand (at the desk or at the front door) or what to do or say (chitchat or urging the students to get ready quickly) at the start of the lesson. Irrelevant appraisals referred often to a certain routine or to having experience with the situation such as asking a student to stop eating chewing gum, or starting the lesson by having students to get their books and related material on the table. Concerning the evaluative appraisals, teachers' responses were positioned at different places in the Teacher Interpersonal Circle: appraisals related to the categories 'steering'

(high on control and affiliation), 'reprimanding' (high on control, low on affiliation), and 'accommodating' (low on control, high on affiliation) occurred most often. In a situation in which the interpersonal identity standard matched with the appraisal, *interpersonal role identity verification* occurred: appraisals of specific classroom situations by the teacher were consistent with his/her interpersonal identity standard. This was the case for 13 of the 29 teachers: their identity standards matched with their appraisals in most situations. In other cases, however, this match was only partial (10 teachers) and sometimes there was no match at all (six teachers), or, in other words, a *lack of identity verification*. To conclude, the results showed that appraisals and interpersonal identity standards of teachers often did not (or only partially did) match.

Possible changes in the teachers' interpersonal role identity were studied and reported on in Chapter 3 by focusing on teachers' interpersonal identity standards and teachers' appraisals of specific situations in their classrooms and how these appraisals matched (or mismatched) with their interpersonal identity standards at two different moments in time with a period of two years in between. Semi-structured and videostimulated interviews were conducted with 24 teachers in 2011 and 2013. The data concerning teachers' interpersonal identity standard and the evaluative appraisals was analyzed using the Teacher Interpersonal Circle. For 17 of the 24 teachers, the interpersonal identity standard changed towards either a higher level of control, a higher level of affiliation or a higher level of both. Regarding the evaluative appraisals of all three situations (start of the lesson, reacting to student misbehavior, and reacting to positive student behavior), the results showed that one quarter of the participants did not change their evaluative appraisals. The evaluative appraisals that changed, showed an increase of the codes 'friendly' and a decrease of the codes 'uncertain', 'dissatisfied', 'reprimanding', and 'enforcing'. For the affective appraisals, a clear trend of change could be found which can be described as 'a change towards irrelevant affective appraisals'. Concerning the change in teachers' identity verification, for 13 teachers (mostly healthy matchers) no change was found. However, 8 teachers changed from healthy mismatchers to healthy matchers. This study also showed that some teachers changed both their interpersonal identity standards and their appraisals of specific classroom situations over time. This was also the case for experienced teachers who had been in the teaching profession for more than 20 years. To conclude, teachers who were healthy matchers were likely to stay healthy matchers over

time. Teachers who were healthy mismatchers were able to change over time towards healthy matchers. Teachers – at least some of them - were thus able to overcome a lack of identity verification.

The relation between teachers' interpersonal role identity and teachers' wellbeing was reported on in Chapter 4. Teachers' wellbeing was investigated using questionnaires about self-efficacy, burnout, and work engagement. We investigated this relationship by comparing three groups of participants: teachers with a healthy interpersonal identity standard and matching appraisals ('healthy matchers'); teachers with a healthy interpersonal identity standard with mismatching appraisals ('healthy mismatchers'); and teachers with an unhealthy interpersonal identity standard and either matching or mismatching appraisals ('unhealthy (mis)matchers'). Our expectation was that the three groups would differ in terms of self-efficacy, burnout, and work engagement. Concerning self-efficacy, our expectations were confirmed. The results showed that teachers with a healthy match scored statistically significantly higher on instructional self-efficacy than the teachers with an unhealthy (mis)match and that teachers with a healthy match scored statistically significantly higher on instructional self-efficacy than teachers with a healthy mismatch. For burnout, the results showed a trend (not statistically significant): teachers from the healthy matchers group scored lower on burnout scales compared to teachers from the other two groups. Regarding work engagement, a trend (not statistically significant) could be found with healthy matchers scoring higher than unhealthy (mis)matchers, meaning that teachers with a healthy interpersonal identity standard and matching appraisals might be more engaged in their work than teachers with unhealthy interpersonal identity standards. The results might indicate the importance of a healthy interpersonal identity standard and of matching appraisals of specific classroom situations for teachers' wellbeing, but further research is needed for reaching a more solid conclusion about this issue.

We explored possible factors related to the change of teachers interpersonal role identity and described this in Chapter 5. Data of eight teachers who experienced a change concerning their interpersonal role identity over time was analyzed. More specifically, the 8 teachers that changed from healthy mismatcher (i.e., their interpersonal identity standard was healthy but did not match with appraisals of classroom situations) into healthy matcher (i.e., their interpersonal identity standard was healthy and matched with appraisals of

classroom situations). The results of this study indicated that teachers changing from healthy mismatchers into healthy matchers felt confident about their teaching (average to high score on self-efficacy), enjoyed teaching (average to high score on work engagement), and were open to learn new things (high intellect, BIG 5). All teachers changed their appraisals of specific classroom situations and five of them also changed their interpersonal identity standards to a certain degree. This change in interpersonal identity standards could in all cases be characterized as a gradual or subtle change within the domain of the healthy interpersonal standards. The results of this study further showed that not all teachers took the initiative themselves towards change concerning their interpersonal role identity. In some cases, changes in the environment, such as being assigned to similar classes, could also lead to change.

The identity theory as described by Burke and Stets (2009) appeared to be useful as a framework to study and analyze teachers' interpersonal role identity via its two elements, namely teachers' appraisals of specific classroom situations and their interpersonal identity standard. By focusing on one role identity of teachers, i.e., teachers' interpersonal role identity, it was possible to study this role in more detail. The in-depth study of the interpersonal role identity enabled us to gain detailed insight in manifestations of the interpersonal role identity in specific classroom situations. Studying teachers' appraisals of these situations and how these are connected with their more overarching interpersonal identity standards may result in more detailed descriptions of a teacher's professional identity. In addition, the concepts studied in this dissertation such as (the degrees of) identity verification or the categorization of identity standards (healthy vs unhealthy) can also be transferred to the study of teacher's profession identity in general and to other role identities of teachers.

An important part of this dissertation was related interpersonal identity standards, appraisals of specific classroom situations and to a *lack of identity verification*. The participants who lacked identity verification in 2011 often experienced negative feelings possibly due to this lack of identity verification and therefore they might have changed in 2013 either their appraisal of specific situations or their interpersonal identity standard. The appraisals of specific classroom situations were studied using three situations (the start of the lesson, reacting to student misbehavior, reacting to positive student behavior). Our research

indicates that appraisals of different situations may compare differently to interpersonal identity standards and thus that appraisals of different situations may be of different influence on teachers' interpersonal role identity. It is argued that identity verification is needed since people experience stress if this is not the case. However, a lack of identity verification can also be seen as an opportunity to reflect upon a situation and reappraise that situation and/or to reconsider the interpersonal identity standard (Chapters 4 and 5). The question arises to what extent a mismatch - a lack of identity verification - can be helpful for teacher learning.

The study on teacher's interpersonal role identity has resulted in a theoretical framework and provided a 'language' to discuss one of the crucial role identities of the teacher: the interpersonal role identity. Besides this, a tool has been developed based on the results of this study, called the Match Maker Analysis. The Match Maker Analysis is a practical tool in which the (student) teacher is stimulated to reflect on his/her interpersonal role identity in several steps successively consisting of including exploring his/her appraisals, his/her interpersonal identity standard and the level of identity verification. The Match Maker Analysis might be seen as the 'product' of this research for the teaching practice, a tool that teacher educators and coaches in schools can use for supporting (student) teachers to (further) develop or change their interpersonal role identity.

Samenvatting: De Interpersoonlijke rolidentiteit van docenten

Samenvatting: De interpersoonlijke rolidentiteit van docenten

De docent-leerling relatie is belangrijk voor docenten in alle fasen van hun loopbaan. Docenten hebben dagelijks contact met leerlingen en geven betekenis aan dit contact in relatie tot hoe zij zichzelf zien als professionals (hun professionele identiteit). De docent-leerling relatie is een belangrijk aspect van de professionele identiteit van docenten en is daardoor tevens van invloed op hun functioneren, gevoelens van stress en welbevinden. In dit proefschrift richten we ons op de betekenis die docenten geven aan hun relatie met leerlingen in de klas, welke tot uiting komt in de interpersoonlijke rolidentiteit van docenten wordt gevormd door de betekenis die de docent geeft aan de docent-leerling relatie.

Er is nog weinig bekend over hoe docenten betekenis aan deze relatie geven in specifieke situaties in de klas (waardering) en of deze betekenisgeving gerelateerd is aan hun interpersoonlijke referentiekader (interpersoonlijke identiteitsstandaard). Daarnaast is onbekend of de interpersoonlijke rolidentiteit van docenten (of een van de twee elementen van deze identiteit: waardering van situaties en interpersoonlijke identiteitsstandaard) verandert in de tijd en welke factoren die verandering eventueel beïnvloeden. Weinig is voorts bekend over de consequenties van het al dan niet overeenkomen van de interpersoonlijke identiteitsstandaard met de waardering van specifieke situaties in de klas.

In theorieën over professionele identiteit (e.g. Burke & Stets, 2009) wordt gesteld dat beide elementen van de interpersoonlijke rolidentiteit overeenkomstig zouden moeten zijn om stress te voorkomen. Echter, dit is nog niet empirisch onderzocht bij docenten. Empirisch onderzoek naar de interpersoonlijke rolidentitieit van docenten is van belang voor docenten en lerarenopleiders omdat het twee zeer belangrijke issues van beginnende docenten combineert: professionele identiteit (Wie ben ik als docent?) en interpersoonlijke relaties (Wat voor relatie wil ik als docent met mijn leerlingen?). Het concept interpersoonlijke rolidentiteit van docenten dat wij in dit proefschrift hanteren biedt aanknopingspunten voor een praktisch hanteerbaar instrument om tegelijkertijd te werken aan identiteitsontwikkeling en klassenmanagement. Lerarenopleiders kunnen (beginnende) leraren ondersteunen bij de ontwikkeling van een interpersoonlijke identiteitsrol waarbij de interpersoonlijke identiteitsstandaard en waardering overeenkomen.

De centrale onderzoeksvraag in dit proefschrift was: Hoe komt de interpersoonlijke rolidentiteit van docenten tot uiting in interpersoonlijke identiteitsstandaarden en waarderingen van specifieke situaties in de klas? In dit proefschrift heeft deze vraagstelling geleid tot de volgende meer specifieke onderzoeksvragen:

- (1) Hoe geven docenten betekenis aan specifieke situaties in de klas en hoe is dit gerelateerd aan hun interpersoonlijke identiteitsstandaard? (Hoofdstuk 2)
- (2) Hoe verandert de interpersoonlijke rolidentiteit van docenten gedurende een periode van twee jaar? (Hoofdstuk 3)
- (3) Hoe verschilt het welbevinden van docenten in termen van (a) doelmatigheidsverwachting (de mate waarin docenten denken invloed te hebben op het leren en het presteren van hun leerlingen), (b) burnout en (c) werkbeleving tussen gezonde matchende docenten, gezonde mismatchende docenten, ongezonde (mis)matchende docenten? (Hoofdstuk 4)
- (4) Welke factoren zijn van invloed op veranderingen van de interpersoonlijke rolidentiteit van docenten? (Hoofdstuk 5)

In Hoofdstuk 2 is het conceptuele kader van de interpersoonlijke rolidentiteit van docenten uiteengezet en geïllustreerd aan de hand van empirische gegevens van 29 docenten. Semi-gestructureerde en video-gestimuleerde interviews zijn gebruikt om data te verzamelen over de interpersoonlijke identiteitsstandaarden van docenten en hun waarderingen van specifieke situaties in de klas. In dit proefschrift zijn drie specifieke situaties in de klas onderzocht: de lesstart, reageren op negatief leerlinggedrag en reageren op positief leerlinggedrag. Eerder onderzoek heeft aangetoond dat deze drie situaties belangrijk zijn voor de docent-leerling relatie.

Een waardering is het resultaat van de evaluatie van een docent over een specifieke interpersoonlijke situatie op micro-niveau (Welke betekenis heeft deze situatie voor mij als docent op dit moment? Wat denk/voel ik en wat kan ik doen?). De uitkomst van het evaluatieproces, de waardering, kan afhankelijk van de docent, gepaard gaan met positieve of stress gerelateerde emoties. Waarderingen dragen dan ook positief of negatief bij aan het welzijn van docenten. Er kan onderscheid gemaakt worden tussen een affectieve waardering en een evaluatieve waardering. De affectieve waardering geeft antwoord op de

vraag: Ben ik in deze situatie in de problemen of niet, en zo ja hoe? De affectieve waardering wordt uitgedrukt in een emotie of gevoel en wordt grofweg onderverdeeld in drie categorieën: irrelevant, positief, stressvol. Wanneer een situatie door een bepaalde docent wordt gewaardeerd als irrelevant betekent dit dat deze docent geen effect ervaart van deze situatie voor zijn/haar welzijn, docentschap en interpersoonlijke identiteitsstandaard. Wordt een situatie door een docent als positief gewaardeerd, dan ervaart de docent die bepaalde situatie als positief voor zijn/haar welzijn, docentschap en interpersoonlijke identiteitsstandaard. Een stressvolle waardering betekent dat de docent de situatie als bedreigend of beschadigend ervaart voor zijn of haar welzijn, docentschap en interpersoonlijke identiteitsstandaard. De evaluatieve waardering geeft antwoord op de vragen: welke mogelijkheden zijn er om met deze situatie om te gaan en wat kan ik (succesvol) doen?

De evaluatieve waardering en de interpersoonlijke identiteitsstandaard werden geanalyseerd met de Interpersoonlijke Cirkel – Docent, ook wel het Model Interpersoonlijk Leraarsgedrag genoemd. De Interpersoonlijke Cirkel – Docent bestaat uit twee dimensies: (1) de controle dimensie die de mate van invloed aangeeft die de docent heeft in de relatie met leerlingen (zoals gepercipieerd door de leerlingen), en (2) de nabijheidsdimensie die de mate waarin de docent en de leerlingen met elkaar omgaan in harmonie of juist elkaar tegenwerken (zoals gepercipieerd door leerlingen) aangeeft. Op basis van deze twee dimensies kan de Interpersoonlijke Cirkel opgedeeld worden in acht verschillende interpersoonlijke categorieën : (1) leidend (bijv. sturen, leiding geven), (2) helpend/vriendelijk (bijv., helpen, grapjes maken), (3) begrijpend (bijv., luisteren, ondersteunen, begrip tonen), (4) inschikkelijk (bijv., vrijheid en verantwoordelijkheid geven), (5) onzeker (bijv., verontschuldigen, afwachten), (6) ontevreden (bijv., ontevredenheid uiten, bekritiseren), (7) corrigerend (bijv., corrigeren, verbieden), en (8) dwingend (bijv., strikt, teugels strak houden).

De interpersoonlijke identiteitsstandaard is het referentiekader van een docent met betrekking tot de relatie die hij/zij heeft met de leerlingen in zijn/haar klassen in het algemeen. Deze identiteitsstandaard bestaat uit de relevante opvattingen en ideeën van docenten over hun docent-leerlingrelatie. Een dergelijke referentiekader geeft richting aan het handelen van docenten met betrekking tot hun relatie met leerlingen. Twee soorten

interpersoonlijke identiteitsstandaarden kunnen worden onderscheiden op basis van de Interpersoonlijke Cirkel-Docent: gezonde ongezonde interpersoonlijke en identiteitsstandaarden. Gezonde interpersoonlijke identiteitsstandaarden worden gekenmerkt door een hoge mate van controle en een hoge mate van nabijheid in de Cirkel-Docent. Interpersoonlijke Voorbeelden van gezonde interpersoonlijke identiteitsstandaarden zijn: leidend, helpend/vriendelijk, begrijpend. Ongezonde interpersoonlijke identiteitsstandaarden bevatten een lage of hoge mate van control in combinatie met een lage mate van nabijheid. Voorbeelden van ongezonde interpersoonlijke identiteitsstandaarden zijn: onzeker, ontevreden, corrigerend. Gezonde interpersoonlijke identiteitsstandaarden zorgen voor een lagere stress en hogere leerling-resultaten. Ongezonde interpersoonlijke identiteitsstandaarden zorgen voor een verhoging van docent-stress en hangen negatief samen met leerling-resultaten.

resultaten van deze studie lieten zien dat de interpersoonlijke identiteitsstandaarden van het merendeel van de docenten konden worden gecodeerd als 'leidend' en/of 'helpend/vriendelijk'. Deze interpersoonlijke identiteitsstandaarden vertonen een hoge mate van controle en een hoge mate van nabijheid (in termen van de Interpersoonlijke Cirkel-Docent) en worden beschouwd als 'gezonde' interpersoonlijke identiteitsstandaarden. De resultaten van de affectieve waarderingen lieten zien dat 40% van de affectieve waarderingen van de docenten positief was. Zij gaven aan dat de betreffende situaties precies zo verliepen als zij gehoopt of verwacht hadden, bijvoorbeeld doordat leerlingen actief deelnamen aan een groepsdiscussie of zelfstandig aan het werk waren. Stressvolle affectieve waarderingen werden relatief vaak gevonden voor de lesstart (meer dan 30%). Vooral beginnende docenten gaven aan dat ze zich onzeker voelden over wat ze moesten doen als de leerlingen de klas inkwamen. De docenten twijfelden waar ze moesten staan of zitten (achter het bureau de spullen klaar leggen of bij de deur iedereen verwelkomen?) en wat ze moesten doen (kletsen met de leerlingen of ze juist manen om snel te gaan zitten en hun spullen te pakken?). Irrelevante waarderingen hadden vaak betrekking op een bepaalde routine of eerdere ervaring met de situatie, bijvoorbeeld om een leerling te vragen de kauwgom uit te spugen of om de les te beginnen met het pakken van de benodigde materialen. De evaluatieve waarderingen konden op verschillende plaatsen in de interpersoonlijke cirkel -docent worden gepositioneerd. Ze konden echter het vaakst worden gecodeerd in de categorieën leidend (veel controle en nabijheid),

corrigerend (veel controle, weinig nabijheid) of ruimte latend (weinig controle, veel nabijheid).

In het geval dat de interpersoonlijke identiteitsstandaard overeen kwam met de waardering kon worden gesproken van verificatie. Dit was het geval voor 13 van de 29 docenten: hun interpersoonlijke identiteitsstandaard kwam (grotendeels) overeen met de waardering van de drie specifieke situaties in de klas. Bij andere docenten echter was er slechts in geringe mate overeenkomst tussen de interpersoonlijke identiteitsstandaarden en de waarderingen in de meeste situaties (10 docenten). Bij zes docenten was er geen overeenkomst en was dus sprake van een gebrek aan verificatie van de interpersoonlijke rolidentiteit.

Mogelijke veranderingen in de interpersoonlijke rolidentiteit van docenten zijn beschreven in Hoofdstuk 3. Hoofdstuk 3 richtte zich op de interpersoonlijke identiteitsstandaard en de waarderingen van docenten in specifieke situaties in de klas en hoe de waarderingen (al dan niet) overeenkomen met de identiteitsstandaarden van docenten op twee verschillende momenten in een tijdsbestek van twee jaar. Semigestructureerde en video-gestimuleerde interviews zijn afgenomen bij 24 docenten in 2011 en in 2013. De data met betrekking tot de interpersoonlijke identiteitsstandaard en de evaluatieve waarderingen werden geanalyseerd met de Interpersoonlijke Cirkel Docent. Bij 17 van de 24 docenten veranderde de interpersoonlijke identiteitsstandaard richting zowel meer controle (hogere score op de controle dimensie) als meer nabijheid (hogere score op de nabijheidsdimensie) of vertoonde die trend voor één van beide dimensies. De evaluatieve waarderingen van de drie specifieke situaties in de klas (de lesstart, reageren op negatief leerlinggedrag en reageren op positief leerlinggedrag) bleven gelijk voor 25 % van de respondenten. De waarderingen van de respondenten die wel veranderden lieten een toename zien van de codes 'helpend/vriendelijk' en een afname van de codes 'onzeker', 'ontevreden', 'corrigerend' en 'dwingend'.

Bij de affectieve waarderingen was duidelijk een verandering te zien richting irrelevante affectieve waarderingen. Aangaande de verificatie kon er geen verandering worden gevonden voor 13 docenten (vaak gezonde matchers). Echter, acht docenten veranderden van gezonde mismatcher naar gezonde matcher. De resultaten van deze studie lieten zien dat sommige docenten zowel hun interpersoonlijke identiteitsstandaard als hun

waardering van specifieke situaties in de klas veranderden in de tijd. Dit was ook het geval voor zeer ervaren docenten met meer dan 20 jaar leservaring. Concluderend kunnen we stellen dat docenten die gezonde matchers waren gezonde matchers bleven. Docenten die gezonde mismatchers waren, bleken in staat om te veranderen naar gezonde matchers. Docenten kunnen dus – tenminste sommige van hen – toewerken naar verificatie van de waardering van specifieke situaties en hun interpersoonlijke identiteitsstandaard.

De relatie tussen de interpersoonlijke rolidentiteit en welbevinden van docenten is beschreven in Hoofdstuk 4. Het welbevinden van docenten is onderzocht met vragenlijsten over de doelmatigheidsbeleving, burnout en werkbeleving van docenten. De relatie tussen het welbevinden van docenten en de interpersoonlijke rolidentiteit van docenten is onderzocht door drie groepen respondenten te vergelijken: docenten met een gezonde interpersoonlijke identiteitsstandaard en een overeenkomende waardering (gezonde matchers), docenten met een gezonde interpersoonlijke identiteitsstandaard zonder een overeenkomende waardering (gezonde mismatchers) en docenten met een ongezonde interpersoonlijke identiteitsstandaard met of zonder overeenkomende waardering (gezonde (mis)matchers). De verwachting was dat er verschillen zouden zijn tussen de groepen wat betreft de doelmatigheidsverwachting, burnout en werkbeleving. doelmatigheidsverwachting is onze verwachting bevestigd. De resultaten lieten zien dat docenten met een 'gezonde match' statistisch significant hoger scoorden op hun doelmatigheidsbeleving wat betreft het geven van instructie, dan docenten met een ongezonde (mis)match en docenten met een gezonde mismatch. De resultaten voor burnout lieten een trend zien (niet statistisch significant) dat docenten met een gezonde match lager scoorden op de burnoutschalen dan de andere twee groepen. Wat betreft werkbeleving werd er eveneens een trend gevonden (niet statistisch significant) dat gezonde matchers hoger scoorden dan ongezonde (mis)matchers, hetgeen zou kunnen betekenen dat docenten met een gezonde interpersoonlijke identiteitsstandaard en overeenkomende waarderingen van specifieke situaties in de klas meer betrokken zijn bij hun werk dan docenten met een ongezonde interpersoonlijke identiteitsstandaard. De resultaten lijken te wijzen op het belang van een gezonde interpersoonlijke identiteitsstandaard en overeenkomende waarderingen van specifieke situaties in de klas voor het welbevinden van docenten, maar verder onderzoek is nodig om deze resultaten te onderbouwen.

Onderzoek naar mogelijke factoren die van invloed kunnen zijn op de verandering van de interpersoonlijke rolidentiteit van docenten zijn beschreven in Hoofdstuk 5. Data van acht docenten die een verandering ervoeren in hun interpersoonlijke rolidentiteit zijn hiertoe geanalyseerd. Hierbij ging het specifiek om acht docenten die in de tijd veranderden van gezonde mismatcher (hun interpersoonlijke identiteitsstandaard was gezond maar kwam niet overeen met hun waarderingen van specifieke situaties in de klas) naar gezonde matcher. (hun interpersoonlijke identiteitsstandaard was gezond en kwam overeen met hun waarderingen van specifieke situaties in de klas). De resultaten van deze studie lieten zien dat de docenten vertrouwen hadden in hun lesgeefvaardigheden (gemiddelde tot hoge score op doelmatigheidsverwachting), dat ze plezier hadden in het lesgeven (gemiddelde tot hoge score op werkbeleving) en dat ze open stonden om nieuwe dingen te leren (hoge score op de schaal 'autonomie/intellect' bij persoonlijkheid). Alle acht docenten veranderden hun waarderingen van specifieke situaties in de klas en vijf docenten veranderden ook (in meer of mindere mate) hun interpersoonlijke identiteitsstandaard. Deze verandering van de interpersoonlijke identiteitsstandaard was een subtiele verandering binnen de gezonde interpersoonlijke identiteitsstandaarden; de interpersoonlijke identiteitsstandaarden bleven gezond. De resultaten van de studie lieten verder zien dat niet alle docenten zelf het initiatief namen om hun interpersoonlijke rolidentiteit te veranderen. In sommige gevallen speelde de omgeving een belangrijke rol in de verandering, bijvoorbeeld wanneer een docent meer parallelklassen kreeg of minder tussenuren.

De identiteitstheorie zoals beschreven door Burke & Stets (2009) bleek een nuttig kader om de interpersoonlijke rolidentiteit van docenten te bestuderen en te analyseren aan de hand van de twee elementen 'waarderingen van specifieke situaties in de klas' en de 'interpersoonlijke identiteitsstandaard'. Door te focussen op één rolidentiteit van docenten was het mogelijk om gedetailleerd inzicht te krijgen in een rolidentiteit van docenten (in dit geval: de interpersoonlijke rolidentiteit) met aandacht voor zowel de identiteitsstandaard als de waardering van specifieke situaties in de klas. De bestudering van de waarderingen van specifieke situaties in de klas en hun relatie met de interpersoonlijke identiteitsstandaard draagt bij aan een meer gedetailleerde beschrijving van de professionele identiteit van docenten. Daarnaast kunnen de in dit proefschrift gebruikte concepten zoals de mate van overeenkomst/verificatie en de indeling van de identiteitsstandaarden (gezond

vs. ongezond) ook worden ingezet voor onderzoek naar de professionele identiteit van docenten in het algemeen of voor andere rolidentiteiten van docenten.

Een belangrijk gedeelte van dit proefschrift was gericht op de interpersoonlijke identiteitsstandaard, de waarderingen van specifieke situaties in de klas en (het gebrek aan) de overeenkomst/verificatie daartussen. De docenten met een gebrek aan verificatie in 2011 ervoeren hierdoor zelf vaak negatieve gevoelens, hetgeen een reden kan zijn van hun veranderde interpersoonlijke identiteitsstandaard of waardering van specifieke situaties in de klas in 2013. De waardering van specifieke situaties in de klas is in dit proefschrift bestudeerd aan de hand van drie specifieke situaties (de lesstart, reageren op negatief leerlinggedrag en reageren op positief leerlinggedrag). Ons onderzoek laat zien dat de waarderingen van de lesstart vaker overeenkomen met de interpersoonlijke identiteitsstandaard dan reageren op negatief leerling gedrag en reageren op positief leerlinggedrag. Mogelijk verschilt de invloed die de waardering van een specifieke situatie in de klas heeft op de interpersoonlijke rolidentiteit van docenten als geheel, per situatie. In de literatuur wordt er gesuggereerd dat overeenkomst/verificatie tussen waardering en interpersoonlijke identiteitsstandaard nodig is, omdat mensen anders stress ervaren. Echter, een gebrek aan overeenkomst/verificatie kan ook worden gezien als een mogelijkheid om te reflecteren op een bepaalde situatie en om de waardering van een specifieke situatie in de klas of de interpersoonlijke identiteitsstandaard nog eens te overdenken (Hoofdstuk 4 en 5). De vraag rijst in welke mate een mismatch – een gebrek aan overeenkomst/verificatie - wenselijk is voor het leren van docenten.

Het onderzoek beschreven in dit proefschrift heeft geresulteerd in een theoretisch kader en heeft een 'taal' beschikbaar gesteld om een van de cruciale rollen van docenten vanuit een identiteitsperspectief bespreekbaar te maken: de interpersoonlijke rolidentiteit. Daarnaast is er een praktijkinstrument ontwikkeld op basis van de resultaten van deze studie, de Match Maker Analysis genaamd. De Match Maker Analysis is een praktisch instrument waarmee de docent (in opleiding) wordt gestimuleerd om te reflecteren op zijn/haar interpersoonlijke rolidentiteit in verschillende stappen, waaronder het verkennen van zijn/haar waarderingen, zijn/haar interpersoonlijke identiteitsstandaard en zijn/haar (gebrek aan) overeenkomst/ verificatie. De Match Maker Analysis kan worden gezien als een 'product' van dit onderzoek voor de lerarenopleiding en de praktijk van docenten, een

Samenvatting: De Interpersoonlijke rolidentiteit van docenten

tool die lerarenopleiders en coaches in scholen kunnen inzetten om docenten te ondersteunen hun interpersoonlijke rolidentiteit (verder) te ontwikkelen of te veranderen.

List of publications

Peer-reviewed scientific journals

Van der Want, A. C., den Brok, P., Beijaard, D., Brekelmans, M., Claessens, L. C. A., & Pennings, H. J. M. (submitted). *A longitudinal study of teachers' interpersonal role identity.*

Van der Want, A. C., den Brok, P., Beijaard, D., Brekelmans, M., Claessens, L. C. A., & Pennings, H. J. M. (submitted). The relation between teachers' interpersonal role identity and their wellbeing.

Claessens, L., Van Tartwijk, J., Pennings, H., Van der Want, A., Verloop, N., Den Brok, P., Wubbels, T. (submitted). Teachers' self- and student schema in positive and problematic teacher–student relationships.

Claessens, L., Van Tartwijk, J., Van der Want, A., Pennings, H., Verloop, N., Den Brok, P., Wubbels, T. (submitted). Positive teacher-student relationships go beyond the classroom, problematic ones stay inside.

Van der Want, A.C., Den Brok, P., Beijaard, D., Brekelmans, M. Claessens, L.C.A., & Pennings, H.J.M. (2015): Teachers' Interpersonal Role Identity, *Scandinavian Journal of Educational Research*, 59(4), 424-442.

Claessens, L.C.A.; Pennings, H.J.M., **Van der Want, A.C.**, Brekelmans, M., Den Brok, P., Van Tartwijk, J. (2014). De docent en het sociale klimaat in de klas: Een exploratieve studie naar verschillende aspecten van docent-leerling relaties. *Pedagogische Studiën*, *91*(5), 302-317.

Pennings, H. J. M., Brekelmans, M, Wubbels, T., Van Der Want, A. C., Claessens, L. C. A., & Van Tartwijk J. (2014). A Nonlinear Dynamic Systems Approach to Real-Time Teacher Behavior: Differences between Teachers. *Nonlinear Dynamics, Psychology, & Life Sciences, 18*(1), 23-45

Pennings, H. J. M., Van Tartwijk J., Wubbels, T., Claessens, L. C. A., **Van Der Want, A. C.,** & Brekelmans, M. (2014). Real-time teacher-student interactions. *Teaching and Teacher Education*, *37*, 183-193.

Everington, J., Ter Avest, I, Bakker, C, & Van der Want, A. (2011) 'European Religious Education teachers' biographies and their perceptions of and responses to classroom diversity' *British Journal of Religious Education*, 33(2), 241-256.

Book-chapters

Den Brok, P.J., Van Der Want, A. C., Beijaard, D. & Wubbels, Th. (2013). The interpersonal dimension in the classroom: A model of teachers' interpersonal role identity, appraisal and teacher–student relationships. In A. Gallant & M. Newberry (Eds.), *Emotion and school: Understanding how the hidden curriculum influences relationships, leadership, teaching, and learning* (pp. 141-159). Bingley: Emerald Group Publishing.

Van der Want, A.C., Bakker, C., Ter Avest, I. (2009) Diversiteit in de klas: het perspectief van de leraar, in: Bertram-Troost, G.-D., Avest, I, ter., *Geloven in Samen leven*. Uitgeverij Gopher.

Van der Want, A.C., Bakker, C., Ter Avest, I., Everington, J., (eds.) (2009) Teachers responding to religious diversity. Researching Biography and Pedagogy, Waxmann Verlag.

Van der Want, A.C., Bakker, C., Ter Avest, I., Bertram-Troost, G.-D., Miedema, S., (2009). The power of personal commitment: Dutch teachers and religious diversity, in: Want, A.C. van der, Bakker, C., Avest, I., ter, Everington, J., (eds.) *Teachers responding to religious diversity*. Researching Biography and Pedagogy, Waxmann Verlag.

Publications for practitioners

Van der Want, A.C., Van Uum, M., Den Brok, P. (2012). De implementatie van techniek op school. Een Quickscan. ESoE/IVA Beleidsonderzoek en Advies.

Van der Want, A.C., & Den Brok, P. (Jan. 2013) Een Quickscan voor techniek. *Didactief, Januariy* 2013, 36.

Conference contributions (selection)

Schellings, G., Van der Want, A., Kools, Q., Schildwacht, R., Mommers, J., Kocken, C. (2015). Teachers' dealing with issues in education: a storyline perspective. Paper presented at the European Association for Research on Learning and Instruction (EARLI), 24-29 August, Cyprus.

Van der Want, A.C., Den Brok, P., Beijaard, D., Brekelmans, M. Claessens, L.C.A., & Pennings, H.J.M. (2015). De Veranderende Interpersoonlijke Identiteitsrol van docenten: een verkenning naar bevorderende factoren. Paper gepresenteerd tijdens de Onderwijs Research Dagen (ORD), 17-19 juni: Leiden.

Van der Want, A.C., Den Brok, P., Beijaard, D., Brekelmans, M. Claessens, L.C.A., & Pennings, H.J.M. (2015). Identiteit vanuit een rolperspectief: De interpersoonlijke identiteitsrol van docenten. Paper gepresenteerd tijdens de Onderwijs Research Dagen (ORD), 17-19 juni: Leiden.

Van der Want, A.C., Den Brok, P., Beijaard, D., Brekelmans, M. Claessens, L.C.A., & Pennings, H.J.M. (2014). De Interpersoonlijke Identiteitsrol van docenten: een longitudinale interviewstudie. Paper gepresenteerd tijdens de Onderwijs Research Dagen (ORD), 11-13 juni: Groningen.

Van Der Want, A. C., Den Brok, P.J., Beijaard, D., Brekelmans, J.M.G., Claessens, L.C.A., Pennings, H.J.M., (2013). Teachers' Interpersonal Role Identity. Paper presented at the International Student Association on Teacher Training (ISATT), 1-5 July: Gent (België).

Den Brok, P.J., Van Der Want, A. C., Claessens, L.C.A., Pennings, H.J.M., Wubbels, Th., Brekelmans, J.M.G. & Van Tartwijk, J.W.F. (2013). *Teachers' choices for the teaching career and their teacher student interpersonal relationships in the classroom.* Paper presented at the Annual Meeting of the American Educational Research Association (AERA), 27 April – 1 May: San Francisco, USA.

Van der Want, A.C., Den Brok, P., Beijaard, D., Brekelmans, M. (2011). The importance of the teacher-student interpersonal relationship in teachers' professional identity: role perceptions related to

self- and ideal perceptions. Paper presented at the Annual Meeting of the American Educational Research Association (AERA), 8-12 April: New Orleans, USA.

Van der Want, A.C., Den Brok, P., Beijaard, D., Brekelmans, M. (2010). The development of teacher interpersonal competence throughout the career: professional identity. Poster presented at the International conference on Interpersonal Relationships in Education (ICIRE), 28-29 April, Boulder, USA.

Curriculum Vitae

Anna van der Want studied Theology at Utrecht University, where she obtained her bachelor degree in 2005. After finishing her master 'religion/philosophy of life: education and communication' (2007) and her master 'religion and theology' (2007) she obtained her research master 'Theology' (2009) during which she specialized as a researcher in the field of religious education, world view education and teachers' biography. As a part of her studies, she participated in a project funded by the European Sixth Framework programme entitled 'Religion in Education. A contribution to Dialogue or a Factor of Conflict in Transforming Societies of European Countries. Her research master thesis reported on teachers of religious education and their view on diversity in their classroom. In September 2009 she started her PhD project at the Eindhoven School of Education (Eindhoven University of Technology), which is reported in this thesis. Alongside her PhD project she worked as a teacher educator at the same institute where she taught various courses in the teacher education program. Since October 2014, she works as a post-doctoral researcher and teacher educator at ICLON, Leiden University Graduate School of Teaching.

Dankwoord

Wat was het een mooie tijd! Iedere promovendus gun ik een plek als de Eindhoven School of Education (ESoE, TU/e) om promotieonderzoek te doen. Een plek waar de kansen voor het oprapen liggen, waar je uitgedaagd word om je onderzoek zelf vorm te geven, waar je vanzelfsprekend deel bent van het team en waar je ideeën kan uitwerken; van reisplannen naar Finland en congresbezoeken tot borrelcommissies, van nieuwsbrieven tot invulling van colloquia en een compleet vak tot het uitzoeken van gastcolleges: ik heb ervan genoten mede dankzij alle fijne collega's van de ESoE.

Zoals een leraar meerdere rollen en rolidentiteiten heeft, zo heb ik dat als onderzoeker en lerarenopleider ook. In de context van mijn promotietraject hebben veel mensen invloed gehad op een of meerdere van mijn rolidentiteiten. Al die mensen ben ik enorm dankbaar.

Allereerst mijn drie (co)promotoren: Perry den Brok, Douwe Beijaard en Mieke Brekelmans. Jullie verscheidenheid in achtergrond zorgde voor een dusdanig breed palet aan onderzoeksexpertise en netwerk dat jullie me altijd op weg konden helpen. Daarbij vind ik jullie betrokkenheid bij mijn promotietraject bewonderenswaardig: jullie begeleiden stuk voor stuk ontzettend veel promovendi en toch voelde dat niet zo, zelfs niet als ik achter drie andere promovendi van Perry in de rij stond voor zijn kamer om een korte vraag te stellen. Perry, ik waardeer het dat je altijd op een positieve manier constructieve feedback geeft en dat je zo open bent over je eigen loopbaankeuzes. Douwe, naast je scherpe blik waardeer ik je directheid (ook al schrok ik daar soms van) en ben ik dankbaar dat je mij altijd zo kraakhelder en overtuigend kon uitleggen waarom mijn onderzoek relevant is. Waar ik vaak voor 8.00 uur 's ochtends even bij Perry binnenliep, kon ik bij Mieke altijd aan het einde van de dag terecht. Je maakte tijd om met mij achter de computer analyses te 'runnen' en hechtte waarde aan de verbinding met het hele aandachtsgebied en mijn fijne plek op de Universiteit Utrecht (UU).

Tweemaal heb ik al mijn begeleiders (Douwe Beijaard, Perry den Brok, Mieke Brekelmans, Jan van Tartwijk, Nico Verloop, Theo Wubbels en in de beginfase ook Jan Vermunt) uit het grote aandachtsgebied waar ik deel van uitmaak genomineerd voor de

Beste Begeleiders Prijs (VOR Promovendi Overleg). En terecht. Jullie hebben heel wat middagen met ons gebrainstormd over het onderzoek, 's avonds workshops voor onze docenten (respondenten) gegeven over docent-leerlingrelaties gegeven op diverse avonden en talloze stukken tekst van ons gelezen. Naast jullie waardevolle inhoudelijke inbreng gaven jullie tijdens onze bijeenkomsten ook een mooi kijkje in hoe wetenschap kan zijn: mateloos gefascineerd in een specifiek onderwerp werden er scherpe discussies gevoerd terwijl en passant het reilen en zeilen van ieders instituut werd besproken.

Thanks to the ESERA Travel Grant I got the opportunity in 2012 to visit dr. Heidi Krzywacki and her colleagues in Helsinki University. It was a very nice to discuss our research together and to get introduced to the Finnish educational system.

Prof. Dr. Anneli Eteläpelto and I met at the ISATT conference in Ghent (2013). I am very grateful that in the Spring of 2014 I could stay for two months with Anneli and here PROAGENT-group at the University of Jyväskylä, Finland: It was an amazingly inspiring and empowering environment and I enjoyed the discussions we had and the various trips we made.

Aan dit onderzoek hebben heel veel docenten lange tijd intensief meegewerkt: vragenlijsten laten invullen door leerlingen, je laten filmen en interviewen, avonden langskomen op de universiteit: en dat 3 jaar lang. Ik ben jullie dankbaar voor jullie deelname en ik vind jullie openheid naar mij als onderzoeker toe echt geweldig!

Collega's zijn belangrijk op alle fronten: inhoudelijk, methodisch, procesmatig, privé. Wat ben ik blij dat ik zulke fijne collega's heb getroffen op de ESoE en de UU. Ook op het ICLON heb ik inspirerende, hulpvaardige en begripvolle collega's mogen leren kennen. De ruimte, opleiding en ondersteuning die ik daar krijg als onderzoeker en lerarenopleider maakt me enorm enthousiast/ smaakt naar meer!

Van sommige mensen kan je je afvragen of het nog wel collega's zijn. Luce Claessens, Heleen Pennings ik waren de afgelopen jaren 'ADG IPP' of "de meisjes van het Aandachtsgebied" (De Jong, 2013). Of kortweg: HAL – Heleen-Anna-Luce. Eerst samen gefocust op de inhoud, toen samen aan de slag met de dataverzameling en later – toen we onze eigen deelprojecten gingen vormgeven – waren we samen betrokken op elkaars proces.

Een promotietraject is veel meer dan een promotie-onderzoek. Dankzij Mariyan Gardenier heb ik me mogen ontwikkelen als lerarenopleider: Mariyan, ik heb heel veel aan je te danken.

Tijdens mijn promotietraject heb ik veel energie gehaald uit het organiseren van activiteiten en excursies voor medepromovendi, onder andere bij het VOR Promovendi Overleg en het Promovendi Netwerk Nederland. Dit heeft mijn blikveld op het doen van onderzoek en het leven van een promovendus enorm verbreed en ik ben mijn medebestuursleden dankbaar voor die gelegenheid.

Carline Vrielink, dank je wel dat je naast al je andere opdrachten, nog tijd vond om voor mij zo'n mooie kaft te ontwerpen!

Zoals ik niet gauw zal vergeten hoeveel ik heb gekregen van de ESoE, zo realiseer ik me ook terdege dankzij wie ik daar ben gekomen. Hoe het allemaal begon: Onder de hoede van Cok Bakker en Ina ter Avest participeerde ik tijdens mijn research master *Theology* (Universiteit Utrecht) in een Europees Onderzoeksproject genaamd 'REDCO': Religion in Education. A contribution to Dialogue or a factor of Conflict in transforming societies of European Countries. Het waren de ervaringen en gesprekken tijdens dat project die me deden besluiten om het onderzoek in te gaan.

Of was er al eerder een kiem gelegd? Ik vind het bijzonder hoe mijn ouders, Han en Berendien, mij de vrijheid hebben gegeven om mij te ontwikkelen, om mij een niet voor de hand liggende studie te laten kiezen en vervolgens aan een promotieonderzoek te beginnen. Ik waardeer het enorm dat ik voor jullie altijd gewoon Anna bleef, en niet een van de vele promovendi die jullie voorbij hebben zien komen. Ik ben ontzettend dankbaar dat ik niet hoef te zeggen dat ik wilde dat jullie mijn ouders waren, maar dat jullie het zijn!

Cor, je weet het hè. Ongeacht de roldentiteit, jij scherpt mij en helpt mij om mijn identity standard en appraisals gezond en matching te houden, om nieuwe rollen binnen mijn identiteit te ontdekken en deze vorm te geven.

Anna van der Want, oktober 2015

ESoE Dissertation Series

- Sande, R. A. W. van de (2007). Competentiegerichtheid en scheikunde leren: over metacognitieve opvattingen, leerresultaten en leeractiviteiten.
- Hooreman, R. (2008). Synchronous coaching of trainee teachers: an experimental approach.
- Rajuan, M. (2008). Student teachers' perceptions of learning to teach as a basis for supervision of the mentoring relationship.
- Raessens, B. A. M. (2009). De E-kubus: een analysemodel voor curricula.
- Rohaan, E. J. (2009). Testing teacher knowledge for technology teaching in primary schools.
- Oemar Said, E. (2009). De Da Vinci Case: een onderzoek naar de relaties tussen vernieuwende leeromgevingen en de motivatie en regulatievoorkeuren van leerlingen in het MBO.
- Koopman, M. (2010). Students' goal orientations, information processing strategies and knowledge development in competence-based pre-vocational secondary education.
- Mittendorff, K. M. (2010). Career conversations in senior secondary vocational education.
- Crasborn, F. J. A. J., & Hennissen, P. P. M. (2010). The skilled mentor. Mentor teachers' use and acquisition of supervisory skills.
- Bragt, C. A. C. van (2010). Students' educational careers in Higher Education: A search into key factors regarding study outcome.
- Bakker, G. de (2010). Allocated only reciprocal peer support via instant messaging as a candidate for decreasing the tutoring load of teachers.
- Vos, M. A. J. (2010). Interaction between teachers and teaching materials: on the implementation of context-based chemistry education.
- Bruin-Muurling, G. (2010). The development of proficiency in the fraction domain.
- Cornelissen, L. J. F. (2011). Knowledge processes in school-university research networks.
- Kraemer, J-M. (2011). Oplossingsmethoden voor aftrekken tot 100.
- Stiphout, I. M. van (2011). The development of algebraic proficiency.
- Saeli, M. (2012). Teaching programming for secondary school: a pedagogical content knowledge based approach.
- Putter-Smits, L. G. A. de (2012). Science teachers designing context-based curriculum materials: developing context-based teaching competence.
- Ketelaar, E. (2012). Teachers and innovations: on the role of ownership, sense- making and agency.
- Dehing, F. (2012). Preparing students for workplace learning in higher engineering education.

- Vrijnsen-de Corte, M. C. W. (2012). Researching the teacher-researcher. Practice-based research in Dutch professional development schools.
- Doppenberg, J. J. (2012). Collaborative teacher learning: settings, foci and powerful moments.
- Linden, P. W. J. van der (2012). A design-based approach to introducing student teachers in conducting and using research
- Diggelen, M. R. van (2013). Effects of a self-assessment procedure on VET teachers' competencies in coaching students' reflection skills.
- Gorissen, P. J. B. (2013). Facilitating the use of recorded lectures: Analysing students' interactions to understand their navigational needs.
- Keuvelaar van den Bergh, L. (2013). Teacher feedback during active learning: The development and evaluation of a professional development programme.
- Pillen, M. T. (2013). Professional identity tensions of beginning teachers.
- Marée, T. J. (2013). Scripted collaborative enriched skeleton concept mapping to foster meaningful learning.
- Gomez-Puente, S. (2014) Design-based learning: exploring an educational approach for engineering education.
- Coninx, N.S. (2014). Measuring effectiveness of synchronous coaching using Bug-In-Ear device of pre-service teachers.
- Griethuijsen, R.A.L.F. (2015). Relationships between students' interest in science, views of science and science teaching in upper primary and lower secondary education.
- Want, A.C, van der (2015). Teachers' Interpersonal Role Identity

Teachers interact with students every day and give meaning to these interactions in relation to themselves as professionals. In this dissertation, we focused on the meaning teachers give to their relationship with students in the classroom, referred to as teachers' interpersonal role identity.

The in-depth study of the interpersonal role identity enables us to gain detailed insight in manifestations of the interpersonal role identity in specific classroom situations. Studying teachers' appraisals of these situations and how these are connected to teachers' more overarching interpersonal identity standards may result in more fine-grained descriptions of a teacher's professional identity.

This study on teachers' interpersonal role identity provided a 'language' to discuss one of the crucial role identities of the teacher: the interpersonal role identity. To this end, we developed a tool (the Match Maker Analysis) based on the results of this study, enabling teacher educators an coaches in school to support (student) teachers with the development of their interpersonal role identity.