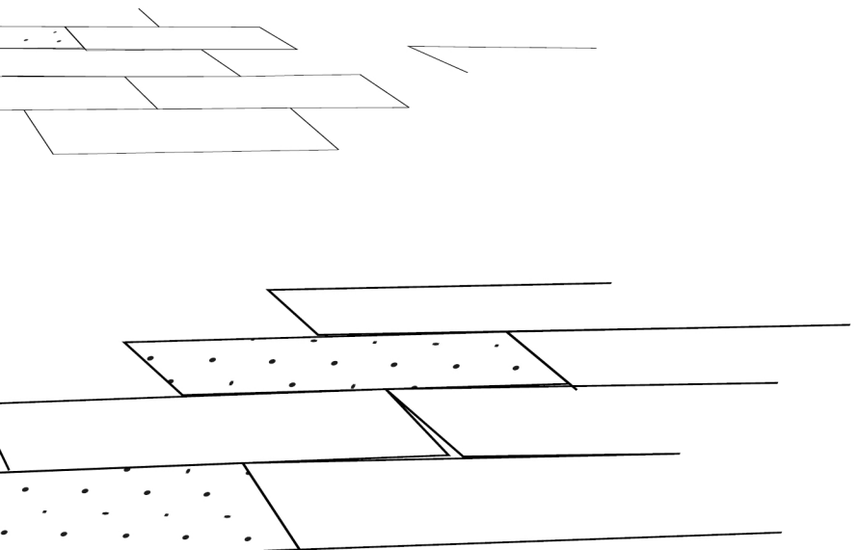
As classrooms have become more culturally diverse, teachers are facing two challenges of how to deal with this diversity. First, teachers are tasked with developing practices that enable minority students to academically perform to the same degree as their ethnic majority classmates. And second, teachers are challenged to teach about the topic of cultural and ethnic diversity in ways that positively contribute to intergroup attitudes and interactions among children of diverse backgrounds. In this dissertation, Jolien Geerlings investigates the importance of interpersonal, dyadic interactions between teachers and students in addressing these challenges, through empirical studies conducted among elementary school teachers and their students in The Netherlands. Dyadic relationships are found to be important for academic development because teachers can experience less efficacy in teaching individual minority students, which is in turn related to their academic engagement. Moreover, outgroup attitudes of majority and minority students are influenced by experiencing close or conflictual dyadic relationships with teachers. This book broadens the literature on student-teacher relationships by exploring both affective and efficacy aspects of these relationships, as well as academic and social consequences, and discusses the complexities around sustaining positive student-teacher relationships for teaching professionals in culturally diverse classrooms.

Jolien Geerlings *obtained a Master's degree in Cultural Anthropology at the Radboud University Nijmegen. In 2009, she graduated cum laude from the Research Master program 'Migration, Ethnic relations, and Multiculturalism' at Utrecht University. Subsequently, she worked at research institute Movisie, in Utrecht, and at department of Educational Sciences of the University of Twente. She conducted the present research as part of her PhD research at the Interuniversity Center for Social Science Theory and Methodology (ICS) and the European Research Center of Migration and Ethnic Relations (Ercomer) of Utrecht University. Jolien currently works as a lecturer at the department of Interdisciplinary Social Sciences (ISS) of Utrecht University.*



ICS

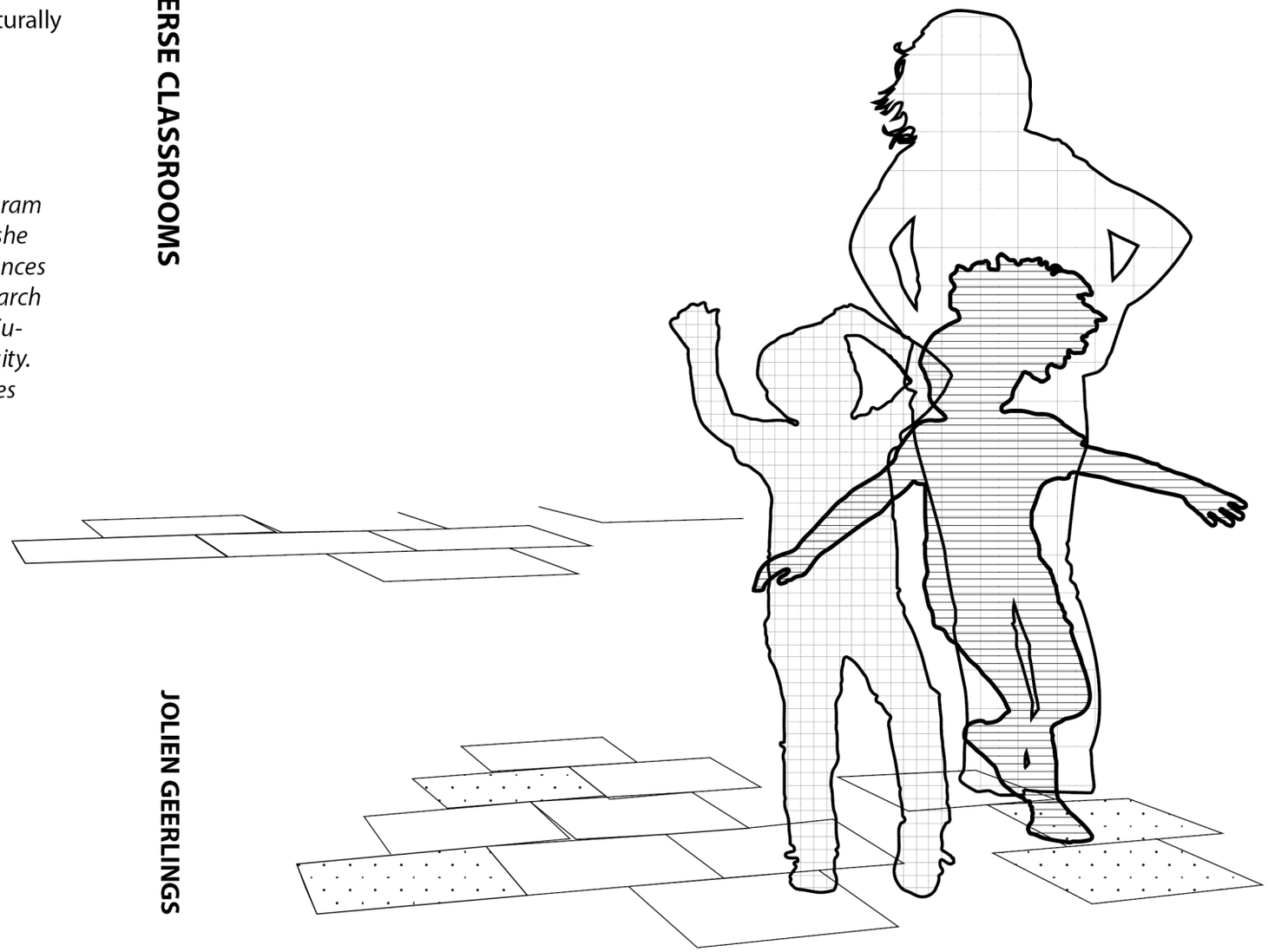
TEACHING IN CULTURALLY DIVERSE CLASSROOMS

JOLIEN GEERLINGS

Jolien Geerlings

Teaching in culturally diverse classrooms

The importance of dyadic relations between teachers and children



Teaching in culturally diverse classrooms

The importance of dyadic relations between teachers and children

Jolien Geerlings

Manuscript committee: Prof. dr. C. Finkenauer (Utrecht University)
Prof. dr. M. de Haan (Utrecht University)
Dr. L. Hornstra (Utrecht University)
Prof. dr. R. Veenstra (Groningen University)
Prof. dr. K. Verschueren (KU Leuven)

Printing Ridderprint BV | www.ridderprint.nl

ISBN 978-94-6416-380-3

Teaching in culturally diverse classrooms

The importance of dyadic relations between teachers and children

Lesgeven in cultureel diverse klassen

Het belang van dyadische relaties tussen leerkrachten en kinderen

(met een samenvatting in het Nederlands)

Proefschrift

ter verkrijging van de graad van doctor aan de
Universiteit Utrecht
op gezag van de
rector magnificus, prof. dr. H.R.B.M. Kummeling,
ingevolge het besluit van het college voor promoties
in het openbaar te verdedigen op
woensdag 10 februari 2021 des middags te 16.15 uur.

door

Jolien Geerlings

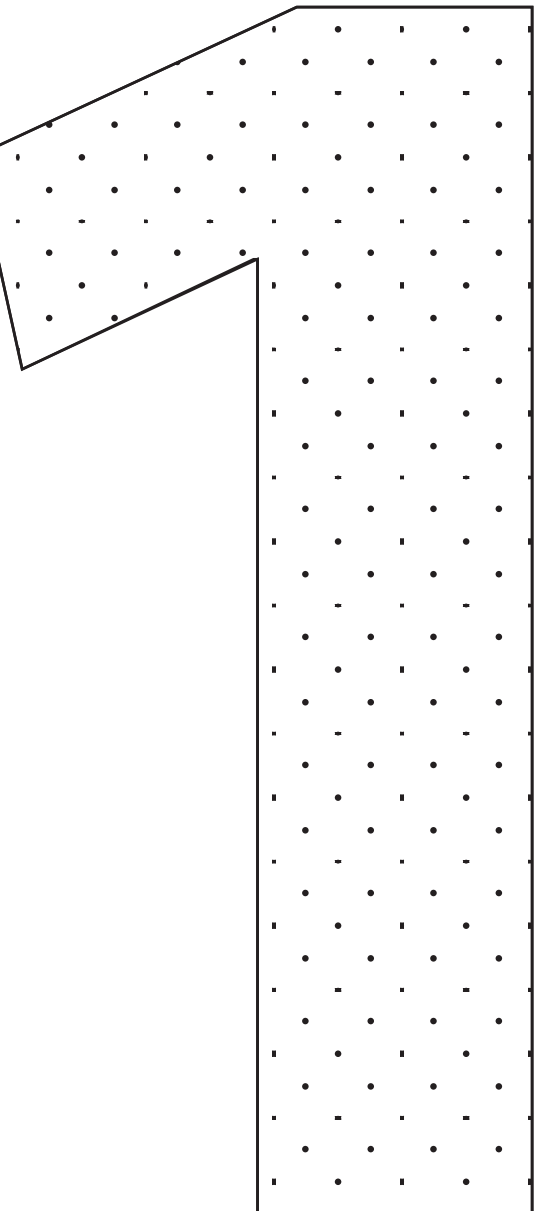
geboren op 29 augustus 1985
te Rosmalen

Promotor:
Prof. dr. M.J.A.M. Verkuijten

Copromotor:
Dr. J.T. Thijs

This research was supported by grant 411-12-036 from the Netherlands Organization for Scientific Research.

Contents



Chapter 1

Introduction and discussion

1.1 The challenges of teaching ethnically diverse student populations

As societies have become more ethnically diverse in composition, so have their schools. This is also the case in the Netherlands, where the percentage of inhabitants with a non-ethnic Dutch background[1] has risen to 23 percent and is expected to increase to 35 percent in 2060. Of these inhabitants with a non-ethnic Dutch background, about 60 percent originate form non-Western countries[2] (CBS, 2018c). The ethnic diversity is even more prominent in the younger strata of the population. Among children under the age of eleven, 21 percent have a non-Western background, compared to 14 percent in the general population. These children (around 80 percent of non-Western migrant children) are largely considered second or third generation migrants[3] (CBS, 2018a; De Mooij, Bloemendal, & Dieleman, 2018). As a result, even given regional differences in ethnic composition (CBS, 2018b), ethnic diversity is a common feature of many classrooms in the Netherlands.

In many ways, working with ethnically diverse student populations can be enriching for teachers; it often fosters creativity regarding to teaching practices and it allows teachers to address issues of, and prepare students for interactions with, diversity in society in general (e.g. Leung et al., 2008). However, the literature on ethnic or cultural diversity in education that has accumulated over the last decades also shows that teachers face challenges when working with diverse student populations. These challenges are often centered around two broad themes.

[1] In this thesis the term ethnic Dutch background is used to refer to people who were born in the Netherlands to parents who were also born in the Netherlands and also identify themselves as Dutch. As such, the term will represent people who have roots in the Netherlands over two or more generations (Dutch parents), and label themselves as having a Dutch ancestry. The term 'non-ethnic Dutch background' is used for all people who are not categorized as (or do not self-categorize as) ethnic Dutch. I am aware of literature that found that biracial students tend to have different school experiences than mono-ethnic or native Dutch students (e.g. Karssen et al., 2016). However, given the diverse and relatively small number of these minority students in the data used in this dissertation, it was not possible to assess distinctions between bi-ethnic and mono-ethnic students.

[2] Non-Western countries include all countries in Africa, Latin-America and Asia (excluding Japan or Indonesia) and Turkey. People with a Japanese and Indonesian background are categorized as western based on their social-economic position in society (CBS, 2018a)

[3] Second generation is defined as children with at least one non-Western parent who was born abroad (first generation). Third generation is defined as children with at least one parent with a second generation background (CBS, 2018a).

First, there is the challenge of *teaching ethnically diverse students* (in the literature often differentiated into ethnic minority and majority groups) in ways that optimize their academic achievement.[4] Given the prevalent phenomenon of academic underperformance by first and second generation minority students in Western societies (e.g. Heath et al., 2008; Portes & MacLeod, 1999), this has been a prominent feature of much of the school-based diversity research. Teachers, thus, face the task of developing tailored practices that enable minority students to perform and grow academically and psychologically to the same degree as their ethnic majority classmates.

The second challenge for teachers in dealing with ethnic diversity in schools revolves around *teaching about the topic of cultural and ethnic diversity*. Schools are often seen as important contexts in which students learn how to navigate a diverse society and in advancing positive intergroup relations among children from an early age onwards (e.g. Ülger, Dette-Hagenmeyer, Reichle, & Gaertner, 2018; Verkuyten & Thijs, 2013). As such, teachers face the task of designing and implementing teaching practices that positively contribute to intergroup attitudes and interactions among children of diverse backgrounds.

For both of these challenges, interpersonal, dyadic interactions between teachers and students can play an important role. With regard to the first challenge of effectively *teaching ethnic minority students*, studies have demonstrated that affective dyadic student-teacher relationships, i.e. relationships characterized by emotional support, warmth and/or lack of conflict, promote children's academic adjustment, i.e. their engagement in the classroom and their academic achievement (Ly, Zhou, Chu, & Chen, 2012; Roorda, Jak, Zee, Oort, & Koomen, 2017; Roorda, Koomen, Spilt, & Oort, 2011; Wu, Hughes, & Kwok, 2010). Further, some studies have found these affective student-teacher relationships to have stronger positive effects for ethnic minority students than for their majority classmates (Den Brok, Van Tartwijk, Wubbels, & Veldman, 2010; Hughes, Im, & Allee, 2015; and see Roorda et al. 2011). Though this research has established the importance of focusing on interactions between students and teachers on a dyadic level, the main concern has been with the affective aspects of these relationships. More specifically, these studies have mostly focused on how teachers' emotional support helps

[4] It is important to note that a focus on minority students should not be at the cost of majority students. When teachers adopt multicultural teaching practices that mainly focus on ethnic minority students, majority students might feel excluded and may experience less psychological well-being as a result (see Plaut, Garnett, Buffardi, & Sanchez-Burks, 2011).

students of different ethnic backgrounds. Much less attention has been given to how teachers might support students of different ethnicities through other aspects of their teaching, such as their instructional and behavior management strategies. One factor that seems to provide promising insights in this regard is the concept of teacher self-efficacy, i.e. the belief teachers have in their ability to bring about desired student outcomes (Guskey & Passaro, 1994).

The concept of teacher self-efficacy indicates whether teachers believe they are able to provide adequate support to their students. Research has established that teachers who feel efficacious use more supportive and effective teaching practices, which is positively associated with students' academic achievement (for review see M. Zee & Koomen, 2016). However, researchers have only recently started to investigate the dyadic nature of teacher self-efficacy and shown that teachers may feel more efficacious in their interactions with some students than others (M. Zee, De Jong, & Koomen, 2017; M. Zee, Koomen, Jellesma, Geerlings, & De Jong, 2016). An important question is whether teachers also experience such differences in their dyadic interactions with ethnic minority versus majority students.

A *first aim* of this dissertation, therefore, is to address the challenge of teaching minority students by more elaborately examining the dyadic relationships between ethnic minority students and their ethnic majority teachers and to test how these relationships are related to student outcomes. For this, I investigate not only the affective aspects of teachers' relationships with individual students, but also the self-efficacy that teachers experience within these dyadic relations. Studying if teachers experience differences in their dyadic relationships with ethnic minority and majority students offers us more insights in the extent to which teachers feel able to provide equal support to them. Moreover, these potentially different experiences in the student-teacher relationships may also be associated with students' academic development. Therefore, I examine whether and how two aspects of the student-teacher relationship, namely its affective quality and teachers' dyadic self-efficacy, contribute to students' academic engagement.

Concerning the second challenge of *teaching students about diversity* in ways that contribute to positive intergroup relations, teachers have been shown to have a significant impact on students' attitudes. Research has found that when teachers (are perceived to) positively address issues of cultural diversity in their classrooms, students often have more positive outgroup

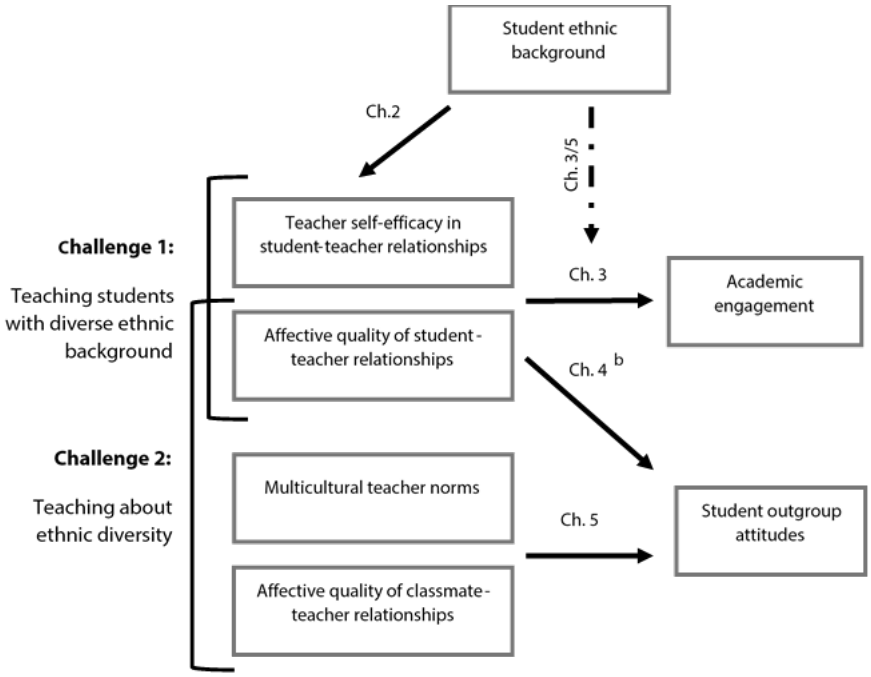
attitudes and more outgroup friendships (for review see Verkuyten & Thijs, 2013). The focus of this line of research tends to be on teacher norms and the instructional content of diversity teaching (Byrd, 2014; Hachfeld, Hahn, Schroeder, Anders, & Kunter, 2015; Rattan & Ambady, 2013; Richeson & Nussbaum, 2004). As such, this literature has mostly concerned itself with what teachers (are perceived to) explicitly communicate about ethnic diversity. Not much attention has been payed to the dyadic interpersonal dimension of teaching about diversity. It is however quite likely that the ways in which teachers interact with ethnically diverse students themselves act as forms of 'teaching by example' and convey norms about dealing with diversity. Investigating how the dyadic relations between teachers and students of different ethnicities are related to students' outgroup attitudes may thus provide new insights into teachers' possible contributions to positive intergroup relations.

The *second aim* of this dissertation, therefore, is to investigate the implications of student-teacher relationships for students' intergroup attitudes. I explore two ways in which affective student-teacher relations may be associated with students' outgroup attitudes. First, the dyadic relations may have a direct association with outgroup attitudes. A previous study found that ethnic minority students have more positive views about the ethnic majority when they experience a high-quality relationship with their ethnic majority teacher, indicating an effect of positive intergroup contact (Thijs & Verkuyten, 2012). However, in this dissertation, I investigate whether these affective dyadic relationships with majority teachers are also associated with the outgroup attitudes of ethnic majority students through the relational security they provide. A second way in which affective relationships between students and teachers may influence outgroup attitudes is not through first-hand experience, but by observing positive relations between teachers and classmates in ethnically diverse classrooms. These teacher-classmate relationships are investigated as a form of 'teaching by example' through which teachers are displaying positive values and norms about ethnic diversity.

The two research aims with the related challenges are summarized in the conceptual model displayed in *Figure 1*. The figure shows which concepts are investigated, how these concepts are studied in relation to one another, and in which chapters they are studied. The purpose of this first chapter is to summarize and contextualize the findings of the four empirical studies that will be described in chapters 2 to 5. To that end, I will first provide an overview of the theoretical framework and previous research that forms the basis of the empirical studies.

Furthermore, I will describe the research questions that have arisen from this theoretical framework and how the empirical studies contribute to the literature (section 1.2 of this chapter). After a description of the research context and the data used in the empirical studies (section 1.3), I will present the main research findings and the overall conclusions from the studies (section 1.4). Finally, this chapter will end with some thoughts on practical implications (section 1.5) and directions for future research (section 1.6).

Figure 1. *Conceptual model*



Note. [a] Figure 1 presents a simplified illustration of the research questions tested in this thesis. It presents the main explanatory and dependent variables used in the studies. In addition to student ethnic background as a possible moderating factor, this thesis investigates, among others, moderating influences of ethnic classroom composition (Ch. 2, 4 & 5), student problem behavior (Ch. 2) and the mediating influence of students' openness to intercultural interactions (Ch. 4).

[b] Unlike Chapters 2, 3 and 5, where I compare associations for ethnic minority and ethnic majority students, Chapter 4 only investigates ethnic majority students as this relation has been established for ethnic minority students in previous research.

1.2 Theoretical and empirical background and research questions

In this section, I will provide an overview of the relevant theoretical and empirical literature, as well as how this dissertation aims to contribute to this literature by trying to answer specific research questions.

1.2.1 Dyadic student-teacher relationships in culturally diverse classrooms

In this dissertation I investigate the dyadic relationships between individual students and their teacher by focusing, first, on the affective nature of these relationships, and second, the teachers' self-efficacy experienced within them.

Positive and negative affect in student-teacher relationships

There is extensive research on the affective quality of dyadic student-teacher relationships and its importance for both student and teacher outcomes. This literature tends to describe student-teacher relationships as positive when they are characterized by closeness, warmth, and emotional support. Conversely, negative student-teacher relationships tend to be described in terms of mutually negative affect, conflict, strife and disagreement (Hamre & Pianta, 2001, 2006; Koomen & Jellesma, 2015)[5]. Relationship closeness and conflict tend to be negatively associated, although conflictual relationships dot not necessarily lack warmth and emotional support (Davis, 2003). Thus, studies have often included both aspects of the student-teacher relationship in their analyses (e.g. de Jong, Koomen, Jellesma, & Roorda, 2018; Jellesma, Zee, & Koomen, 2015; Koepke & Harkins, 2008; Roorda et al., 2017; Thijs, Westhof, & Koomen, 2012).

Much of the research on the affective student-teacher relationships is based on Attachment Theory. This theory was developed by Ainsworth (1973) and Bowlby (1982) and describes attachment as a deep and enduring affectionate bond between two persons. Though the theory focuses on the relationship between children and their primary caregivers (Ainsworth, 1973), it also recognizes the importance of attachments to other important adults, so-called secondary

[5] Some studies also distinguish an aspect of dependency in student-teacher relationships(De Jong et al., 2018). I have not included this dimension in my research. This dimension in most prominently discerned as the teacher's perceptions of the student's behavior in the context of the relationship (Thijs, Koomen, Roorda, & Hagen, 2011). Because I was more interested in the students' perspective of the relationship, I decided to focus on the two affective aspects of the student-teacher relationship, both of which are quite easily distinguishable among young students (Koomen & Jellesma, 2015; Pianta, 2001).

attachments, such as teachers (Ainsworth, 1989). However, because teachers and children only interact in the school context where children have to 'share' their teacher with other classmates, children may be taught by multiple teachers and change teachers each year, attachments to teachers tend to be less exclusive and enduring than parental attachments (Hamilton & Howes, 1992; Howes & Spieker, 2008). Accordingly, the relationships between teachers and students are often described as 'ad-hoc' or secondary attachment bonds (Verschueren & Koomen, 2012; Zajac & Kobak, 2006).

Still, these relationships tend to have a significant impact on children's lives, and a growing body of research demonstrates their importance for children's academic engagement and achievement (Hamre & Pianta, 2001; Hughes & Kwok, 2007; Spilt et al., 2012; Wu et al., 2010, for review see Roorda et al., 2017), and emotional and social development (Davis, 2003; Hamre & Pianta, 2001; Howes, 2000; Howes & Hamilton, 1993). The influence of affective student-teacher relationships has been demonstrated for younger children as well as pre-adolescents (9-13 years old) (Baker, 2006; Little & Kobak, 2003). Moreover, although secure bonds with teachers can be particularly important in the absence of secure parental attachment (Mitchell-Copeland, Denham, & Demulder, 1997), they have been found to provide additional benefits when children are securely attached to their parents as well (Verschueren, Doumen, & Buyse, 2012). In fact, some studies even found that secure attachment to teachers outweighs parental support in its prediction of students' academic development (Gregory & Weinstein, 2004; Wentzel, Russell, & Baker, 2016), illustrating the potent influence of the student-teacher relationship.

Attachment theory states that secure attachment results from repeated social interactions with the caregiver in which the child experiences sensitive and consistent responses to their needs. As such, children learn that they can safely rely on their caregiver (Bowlby, 1988). This relational security enables children to explore and engage with their environment, whether this be physically, cognitively or socially, because they know that they can rely on their caregiver when problems arise (Ainsworth, 1989; Weinfield, Sroufe, Egeland, & Carlson, 2008). As 'ad hoc' attachment figures, teachers can function as a 'safe haven' for students to return to in times of stress or difficulties (see Verschueren & Koomen, 2012). Thus, close and warm student-teacher relationships support the social and cognitive development of children by

providing students with the security and confidence they need to take on challenging social and academic situations (see Davis, 2003).

Efficacy in student-teacher relationships

The concept of teacher self-efficacy originated from social cognitive theory as developed by Albert Bandura (1997, 2001). It refers to the belief that a person has in bringing about behaviors that are conducive to their goals. The concept has been applied to educational contexts where 'teacher self-efficacy' refers to the beliefs teachers have in their capabilities to bring about desired student outcomes (Bandura, 1997; Guskey & Passaro, 1994).

Teacher self-efficacy has been widely studied in educational research and efforts have been made to further define various aspects of this concept (Klassen, Tze, Betts, & Gordon, 2011). Initially it was primarily considered as a trait-like characteristic of individual teachers, with some teachers having stronger beliefs in their capabilities to promote student learning than others (Gibson & Dembo, 1984; Schwarzer & Jerusalem, 1995). This between-teacher variation in self-efficacy was found to be related to various student outcomes. Studies have shown, for instance, that teachers who feel more self-efficacious bring about higher levels of motivation (Schunk, 1991; Skinner & Belmont, 1993) and academic achievement (Caprara, Barbaranelli, Steca, & Malone, 2006; Ross, 1992) in their students.

Later studies established that the extent to which teachers experience themselves to be efficacious differs for the various subjects they teach, and in relation to higher- and lower track students (Raudenbush, Rowan, & Cheong, 1992; Ross, Cousins, & Gadalla, 1996). Thus, teacher self-efficacy appears to be context dependent, as it not only differs between teachers but also *within* them. This within-teacher variance in teacher self-efficacy was further explored by studies examining teacher self-efficacy in specific domains of teaching (Tsouloupas, Carson, Matthews, Grawitch, & Barber, 2010; Woolfolk Hoy & Burke Spero, 2005). This line of research has revealed that teachers may experience varying levels of self-efficacy in the domains of student engagement, classroom management, and instructional strategies (Tschannen-Moran, Hoy, & Woolfolk Hoy, 2007; Tschannen-Moran & Woolfolk Hoy, 2001). The literature has thus demonstrated that self-efficacy is not only a trait-like teacher characteristic but also depends on different teaching tasks, subjects, and types of students.

However, this within-teacher variation in self-efficacy has been mainly measured as a teacher attribute rather than a student-specific characteristic. Scale items, for instance, ask teachers to what extent they feel they can adjust their lessons to the proper level for their students in general, or for higher versus lower achieving students (Raudenbush et al., 1992; Tschannen-Moran & Woolfolk Hoy, 2001). This type of measurement does not directly assess to what extent teachers feel differently efficacious towards individual students. However, the extensive literature on student-teacher relationship quality indicates that teachers experience their dyadic interactions with individual students fairly differently (Hajovsky, Mason, & Mccune, 2017; J. N. Hughes & Cao, 2018; Roorda et al., 2017; Saft & Pianta, 2001; Spilt & Hughes, 2015; Thijs et al., 2012). Therefore, I investigate teacher self-efficacy not as an attribute of the teacher but as an aspect of the student-teacher dyad.

To this end, I use a newly developed measurement of student specific teacher self-efficacy (M. Zee, Koomen, et al., 2016) that is based on a widely used instrument for domain-specific teacher self-efficacy of Tschannen-Moran and Woolfolk Hoy (2001). The items in this new instrument pertain to individual students rather than students in general (e.g., "How much can you do to help this student value learning?" rather than "How much can you do to help students value learning?"). Several recent studies have used this student-specific measurement and found that teachers indeed experience different levels of self-efficacy with individual students in their classrooms (M. Zee, Koomen, et al., 2016), and that this variation can be linked to individual students' problem behavior (M. Zee et al., 2017; M. Zee, De Jong, & Koomen, 2016) and learning difficulties (Schwab, 2019). However, it is unclear if and to what extent teachers experience different levels of self-efficacy in relation to ethnic minority and majority students.

Ethnic incongruence in dyadic student-teacher relationships

Because the student-teacher relationship is dyadic, its perceived quality and teachers' self-efficacy experienced within it can depend on both student and teacher attributes. In this dissertation, I am particularly interested in whether and how the ethnic backgrounds of students and teachers are associated with these relationship aspects (*Figure 1*, top-left arrow, *Chapter 2*). The empirical studies were conducted in the Netherlands where 97 percent of elementary school teachers have an ethnic Dutch majority background (Traag, 2018) and around 20 percent of students have a non-Dutch ethnic minority origin (Inspectie van het

Onderwijs, 2019). Consequently, ethnic minority students are typically taught by teachers whose ethnic background (Dutch) is different from their own.

Previous literature on whether this so-called ethnic incongruence of the student-teacher relationship is associated with its affective quality has yielded mixed results (for review see McGrath & Van Bergen, 2015b). While some studies have not found differences in teachers' perception of the quality of their relationships with students of various ethnic backgrounds (Ewing & Taylor, 2009; Pigott & Cowen, 2000), others have shown teachers to be less positive about their relationships with minority students than their majority students (J. N. Hughes, Gleason, & Zhang, 2005; Saft & Pianta, 2001; Spilt, Hughes, et al., 2012). The latter finding seems to be in line with other areas of research, showing that ethnic majority teachers tend to report lower expectations for students from (some) ethnic minority groups (Glock, Krolak-Schwerdt, Klapproth, & Böhmer, 2013; Irizarry, 2015; Pigott & Cowen, 2000; Tenenbaum & Ruck, 2007; Van den Bergh, Denessen, Hornstra, Voeten, & Holland, 2010) and with research that indicates that majority teachers tend to reprimand minority students more severely for similar offences compared to their ethnic majority classmates (Bates & Glick, 2013; Gregory, Allen, Mikami, Hafen, & Pianta, 2014; Skiba, Michael, Nardo, & Peterson, 2002). Similarly, studies conducted from the students' perspective have found that ethnic minority students often experience the affective relationship with their teacher to be less close (e.g. Birch & Ladd, 1996; J. N. Hughes, 2011) or more conflicted (e.g. Thijs & Fleischmann, 2015) than their majority classmates.

The existing literature has explored the relation between ethnic incongruence and the affective aspects of the student-teacher relationship. Because a dyadic conception of teacher self-efficacy is a recent development, it is unclear whether this efficacy is also related to ethnic incongruence. The scarce research on teacher self-efficacy in diverse student populations has taken a between-teacher approach by focusing on whether teachers feel in general self-efficacious in teaching in a manner that is sensitive to students' ethnic backgrounds (Siwatu, 2007; Tucker et al., 2005). Though such an approach is clearly relevant to diverse educational contexts, these studies do not consider the possibility that the same teacher might experience different levels of self-efficacy with students of different ethnic backgrounds. Previous research has, however, established that negative relationships and negative affect hinder teacher self-efficacy (Yoon, 2002; M. Zee et al., 2017) because these affective relationships are an important source of

information about one's lack of ability to effectively interact with students (Pianta, Hamre, & Stuhlman, 2003; Spilt, Koomen, & Thijs, 2011). Consequently, ethnically incongruous student-teacher relationships are at risk of being experienced as less positive than ethnically congruous relationships, and there might be a similar relation between ethnic incongruence and teacher self-efficacy in dyadic student-teacher relationships.

In general, the literature points to two possible explanations for the negative effects of ethnic incongruence in relationships. First, these relationships might be more prone to miscommunication and misunderstanding. Expectations and behaviors are influenced by cultural backgrounds and as people in ethnically incongruous relationships may only have a partial understanding of each other's cultural background this could lead to miscommunication and misinterpretations of behaviors, beliefs and attitudes (Pigott & Cowen, 2000; Saft & Pianta, 2001; K. I. Van der Zee, Van Oudenhoven, & De Grijs, 2004; Zimmerman, Khoury, Vega, Gil, & Warheit, 1995). Second, these incongruent relationships may be affected by intergroup biases and prejudices. This line of reasoning is consistent with Social Identity Theory, which posits that people tend to distinguish between in-groups (i.e., groups they belong to) and out-groups (i.e., groups they don't belong to) and that they favor in-group over out-group members, because this in-group favoritism provides them with a sense of positive self-esteem (Tajfel & Turner, 1979). As a result people in ethnically incongruous relationships may have less positive, biased, and stereotypical views about their out-group partners (Pigott & Cowen, 2000). Empirical studies have established that the incongruence between teachers' and students' ethnicity and not the ethnicity of the student in and of itself, predicts teachers' differential perceptions of minority versus majority students (Driessen, 2015; Ewing & Taylor, 2009; Saft & Pianta, 2001).

Research questions

Based on the literature discussed, I derived two research questions, which I investigate in *Chapter 2*. As research on teachers' perceptions of the student-teacher relationship has found differences in relationship quality for minority versus majority students, I wanted to examine whether this is also the case with regard to teachers' student-specific self-efficacy. The first research question therefore is: *To what extent do teachers feel differently self-efficacious in teaching ethnic minority students compared to ethnic majority students? (RQ1a).*

Additionally, I wanted to investigate conditions under which ethnic differences in teacher self-efficacy may become more pronounced. More specifically, I look at how problem behavior and classroom composition may play a role in enhancing ethnic differences in teacher self-efficacy. Problem behavior may be an enhancing factor because when such behavior occurs, clear communication is required to address the behavior. Ethnic incongruence in the dyadic relationship can be associated with miscommunication and misunderstanding, and problem behavior might make these difficulties in communication more noticeable, resulting in majority teachers experiencing less self-efficacy with minority students. In relation to classroom composition, when there are only few students with a minority background in the classroom, their ethnic background may be more noticeable, or teachers may have less experience in teaching minority students, which could also negatively affect their experience of self-efficacy with these students. Consequently, I posed the following research question: *To what extent does ethnically differential teacher self-efficacy depends on students' problem behavior and on the ethnic composition of their classrooms? (RQ1b)*

Differential dyadic student-teacher interactions and academic engagement

In addition to establishing possible differences in affective relational quality and student-specific self-efficacy between ethnically congruent and incongruent student-teacher relationships, I aim to investigate how these aspects of the student-teacher relationship are related to student outcomes (*Figure 1*, first horizonal arrow, *Chapter 3*). In this dissertation, I am particularly interested in how relationship quality and self-efficacy are associated with students' academic engagement and how these might differ for ethnic minority and majority students.

Relationship quality, self-efficacy, and academic engagement

Research has demonstrated that affective student-teacher relationship quality is positively related to student outcomes. Meta-analyses have shown that close relationships between student and teacher are related to higher student engagement with schoolwork and higher achievement, while conflictual relationships are negatively associated with these developments (Roorda et al., 2017, 2011). These effects are mostly explained from an attachment perspective, where the attachment that teachers offer is argued to make children feel accepted and provides them with a 'secure base' and a ´safe haven´ to return to in times of need (Bergin & Bergin, 2009; Verschueren & Koomen, 2012). This sense of security helps children to engage in academic and emotionally challenging situations (Bowlby, 1988; Cassidy, 2008). Student-

teacher relations that are warm and lack conflict, therefore, help students to confidently explore new academic and social domains, thus enhancing their development in these fields.

The relation between dyadic teacher self-efficacy and student outcomes has not been studied much. As a general trait-like characteristic teacher self-efficacy has been related to student outcomes such as student motivation and engagement (Schunk, 1991; Skinner & Belmont, 1993), and academic achievement (Caprara, Barbaranelli, Steca, & Malone, 2006; Ross, 1992). Further, a recent study indicates that dyadic teacher self-efficacy is positively associated with academic achievement and that this effect outweighs that of self-efficacy as a general teacher characteristic (M. Zee, Koomen, & De Jong, 2018). Thus, there is some evidence that the self-efficacy in student-teacher relationships has a similar positive relation with student outcomes as the affective quality of these relationships.

The positive association between teacher self-efficacy and students' academic development has been explained with Self-Determination Theory (Caprara et al., 2006), and a sub-set of that theory referred to as Basic Psychological Needs Theory (Ryan & Deci, 2017). Psychological needs theory proposes that people have basic psychological needs, and that fulfilment of these needs will lead to optimal psychological functioning and wellbeing. Three needs are described, namely relatedness (i.e. having warm relationships with others), autonomy (i.e. experiencing that one's behavior originates from oneself rather than external sources) and competence (i.e. experiencing mastery and feel capable in one's actions) (Deci & Ryan, 2016). According to Self-Determination theory, fulfillment of these needs is a condition for personal growth, whereby growth is viewed as the adaptive integration of the individual into their environment (A. M. Ryan, Kuusinen, & Bedoya-Skoog, 2015). In an educational context, growth for students is often reflected in their academic engagement and performance (see Ladd, Kochenderfer-Ladd, & Rydell, 2011). Therefore, fulfilling the basic psychological needs is theorized to contribute to academic engagement and achievement. Supportive teacher practices, which result from teachers' sense of self-efficacy, are argued to appropriately fulfill the needs of students and teacher self-efficacy is therefore likely to be positively related to students' academic outcomes. Overall, I expect that both student-specific self-efficacy and student-teacher relationship quality have positive associations with students' academic outcomes, because both aspects of the relationship are likely to fulfill students' basic needs.

Interactions between dyadic affection and self-efficacy

Both aspects of dyadic student-teacher relationships are likely to have a positive association with student engagement. Affective aspects of the student-teacher relationship are theoretically linked to the basic need for relatedness. Teacher self-efficacy, however, consists of different domains, such as instructional support, behavioral management, and emotional support and, as such, is likely to provide support in domains other than the emotional. Correspondingly, studies have found mixed results on the association between teacher self-efficacy and relationship quality; trait-like self-efficacy was found to be uncorrelated or only weakly correlated with closeness in student-teacher relationships (for review see M. Zee & Koomen, 2016), while a student-specific measure of teacher self-efficacy found a moderate negative association with relational conflict (M. Zee et al., 2017). Thus, it can be assumed that both factors, though related, are relatively distinct from each other, which allows for the possibility of interactive effects. It is unclear, however, whether and how both factors interact because no research has investigated combined effects of teacher self-efficacy and student-teacher relationship qualities on student outcomes. From an attachment perspective, I assume that the trust and security that is generated form a high-quality relationship is a vital foundation for interactions between students and teachers (Bergin & Bergin, 2009; Davis, 2003). Lacking that kind of security and trust is likely to undermine the supportive efforts of teachers. And as such, relational conflict and lack of closeness might diminish the positive effects of teacher self-efficacy on engagement.

Ethnic differences in effects on student outcomes

As this thesis deals with ethnically diverse student populations, I am interested in examining if affective quality and teacher self-efficacy in student-teacher relationships have similar or different implications for students with ethnic minority and majority backgrounds. Empirical studies on this topic have yielded mixed findings. Some studies have found that affective student-teacher relationships and teacher support are more strongly related to academic outcomes of students with a minority background (Den Brok et al., 2010; J. N. Hughes et al., 2015), while other studies have found no such association (e.g, Hughes, Luo, Kwok, & Loyd, 2008). Likewise, there are opposing theoretical expectations. On the one hand, both attachment theory and self-determination theory posit that the benefits of providing relational security and satisfying basic psychological needs are fairly universal. And although the specific benefits may vary depending on cultural, situational and individual factors, they have been found to exists

across many contexts (Church et al., 2013; Deci & Ryan, 2008; R. M. Ryan & Deci, 2000a). On the other hand, it has been argued that students with an ethnic minority background may require more supportive interactions with their teachers, as other forms of support for academic development, such as parental support or financial resources, may sometimes be more limited (Den Brok et al., 2010). Therefore, for ethnic minority students, stronger relations between teacher self-efficacy and affection with students' academic engagement might be expected.

Research questions

The literature discussed led me to derive three research questions, which I investigate in *Chapter 3*. There has been quite some work on the beneficial effects of affective student-teacher relationships on academic outcomes such as engagement and achievement (see Roorda et al., 2017). However, the role of teacher self-efficacy in student-teacher relationships has received much less attention, mostly due to the recent conceptualization of teacher self-efficacy as a dyadic aspect rather than a trait-like teacher characteristic (M. Zee et al., 2018). I, therefore, want to assess how teachers' student-specific self-efficacy and the affective quality of the student-teacher relationship are related to students' academic engagement. In order to provide a systematic test, I used a longitudinal autoregressive panel design which controls for the autoregressive effect of student engagement at a previous time point. The related research question is: *To what extent are teacher self-efficacy and affective quality in student-teacher relationships related to academic engagement over time? (RQ2a).*

Additionally, research has not investigated how both aspects of the dyadic relationship might interact to affect student outcomes. I therefore asked the question: *To what extent do affective quality and teacher self-efficacy in student-teacher relationships interact in their association with engagement? (RQ2b).* Finally, given the culturally diversity in Dutch classrooms and the fact that students with an ethnic minority background are more at risk of academic underachievement (Curran & Kellogg, 2016; Heath et al., 2008), I wanted to examine possible ethnic differences: *To what extent do self-efficacy and affect in dyadic student-teacher relationships have similar or different associations with student outcomes among ethnic majority and minority students? (RQ2c)*

1.2.2 Teaching about diversity and Intergroup attitudes

Investigating dyadic student-teacher relationships could also provide novel insights into how teachers affect students' intergroup attitudes. In this section I will give an overview of the existing literature on this topic. First, I will discuss literature on the multicultural norms teachers may express in their teaching (*Figure 1*, second slanted arrow, *Chapter 4*). Subsequently, I will present some theoretical arguments for why teachers may affect students' intergroup attitudes not only through norms but also through their relationships with individual students, and how these effects may differ for ethnic majority and ethnic minority students (*Figure 1*, third horizonal arrow, *Chapter 5*).

Teacher norms about diversity

In today's diverse societies, most schools pay attention to diversity education. This type of education, often labelled multicultural or intercultural education, takes many different forms but tends to include instructional practices aimed at promoting positive views about cultural diversity and positive intergroup attitudes and relations (McAllister & Irvine, 2000; Verkuyten & Thijs, 2013; Vervaet, Van Houtte, & Stevens, 2018). Commonly, these practices involve improving students' knowledge about cultural differences and also tend to have a prescriptive normative component by conveying what 'ought to be done' in relation to cultural 'others' (see Cialdini, Reno, & Kallgren, 1990).

Empirical research shows that there is considerable variation between teachers in their beliefs about cultural diversity and how to address this diversity in teaching practices (Byrd, 2014; Hachfeld et al., 2015), and students report considerable variation in the extent to which they perceive their teacher to express multicultural views (McAllister & Irvine, 2000; Vervaet et al., 2018; Zinga & Gordon, 2016). Further, studies have found that when students perceive positive teacher norms about diversity they tend to have more positive views about ethnic outgroups and more outgroup friendships (see Verkuyten & Thijs, 2013). Theoretically, these effects might be due to teachers being important authority figures for children and therefore being particularly powerful in prescribing social norms to students (Dunbar & Taylor, 1982; A. M. Ryan & Patrick, 2001). Moreover, literature on social influence suggests that when individuals are convinced by the messages that are expressed by significant others, they are likely to internalize these messages and act accordingly (Kelman, 1958; J. C. Turner & Reynolds, 2001).

The literature on the role of teachers for outgroup attitudes of their students has primarily focused on the (perceived) instructional content of diversity teaching (Byrd, 2014; Hachfeld et al., 2015; Rattan & Ambady, 2013; Richeson & Nussbaum, 2004), whereas the possible role of teachers' interpersonal behavior has been largely neglected.

Positive outgroup attitudes through affective student-teacher relationships

Teachers' affective relationships with their students have been related to outgroup attitudes in previous research. A study by Thijs and Verkuyten (2012) showed that for ethnic minority students, positive affective relationships with their ethnic majority teacher was associated with more positive views about the majority outgroup. These findings can be explained through intergroup contact theory (Pettigrew & Tropp, 2006), which states that when one experiences positive interactions with a member of an outgroup, these experiences are likely to generalize to other members of that outgroup and one therefore holds more positive attitudes about this outgroup.

For ethnic majority students in the Dutch context, teachers tend to be ingroup rather than outgroup members, and as such possible beneficial influences of the student-teacher relationship on outgroup attitudes cannot be explained through intergroup contact. In this thesis I, however, posit that these student-teacher relationships may be positively related to outgroup attitudes of majority students as well, based on their attachment to teachers. As described above, positive student-teacher relationships are able to provide students with a sense of security, a 'secure base', which allows them to explore new challenges and unfamiliar situations, including social situations (Bergin & Bergin, 2009; Bowlby, 1988; Cassidy & Shaver, 2008). Because ethnic outgroup members are relatively unfamiliar, people tend to experience some discomfort in interaction with ethnic others or in imagining such interactions (Davies, Tropp, Aron, Pettigrew, & Wright, 2011; R. N. Turner, Hewstone, & Voci, 2007). As such, interethnic interactions can be considered challenging social situations. Teachers may be able to aid students' outgroup interactions and attitudes by providing them with relational security. Studies among adults have established that experiencing relational security can improve outgroup attitudes (Boag & Carnelley, 2012; Hofstra, Van Oudenhoven, & Buunk, 2005; Mikulincer & Shaver, 2001), but research among younger people has been largely lacking (but see Miklikowska et al., 2019).

The expected beneficial effects of supportive affective relationships with teachers on outgroup attitudes may be explained through two different processes. First, it is likely that the relational security provided by teachers reduces intergroup anxiety in children. Previous research has found that secure relationships reduce children's anxiety in challenging social situations (Bohlin, Hagekull, & Rydell, 2000; Brumariu & Kerns, 2008). Furthermore, studies have indicated that children experience anxiety in (imagined) intergroup interactions (Plant & Devine, 2003; Stephan & Stephan, 1985) and that this anxiety also negatively affects outgroup attitudes (Riek, Mania, & Gaertner, 2006; R. N. Turner et al., 2007; Voci & Hewstone, 2003). Likewise, children tend to withdraw from interacting with unfamiliar others when they experience social anxieties (Howes & Hamilton, 1993). Secure affective relationships with the teacher may, therefore, reduce intergroup anxiety in students, which could make them less anxious to engage with ethnic others and hold more positive attitudes about them.

A second process relates to the motivation to interact with others. This line of reasoning is based on the literature about motivations to reduce prejudice that has shown that when people personally think it is important to be unbiased and open to other groups, they tend to hold more favorable outgroup attitudes (Legault, Green-Demers, Grant, & Chung, 2007; Plant & Devine, 1998; Thijs, Gharaei, & De Vroome, 2016). Likely, this motivation is positively affected by relational security because it describes an intrinsic desire to engage with unfamiliar others. Relational security provides the support to explore novel social situations and makes people less focused on their own emotional states and more concerned with the well-being of others (Mikulincer & Shaver, 2007; Mikulincer, Shaver, Gillath, & Nitzberg, 2005). Thus, children who experience close relationships with their teacher may be more motivated to be open towards ethnic outgroups, and, in turn, have more positive attitudes towards these groups.

Positive outgroup attitudes through observing classmate-teacher relationships

Teachers may not only affect a student's outgroup attitudes through the prescriptive norms they communicate about diversity and by providing relational security. The affective relationships teachers have with classmates are also visible for students and observing these classmate-teacher relationships may matter for students' outgroup attitudes. This line of reasoning is based on social referencing theory (Feinman, 1982; Walden & Ogan, 1988), which states that children observe the behavior of important others in search for cues on how to behave in social situations. Several studies have empirically corroborated this assumption in

school contexts, showing that students observe the quality of interactions between teachers and classmates and use this information to evaluate whom of their classmates to like or dislike (Hendrickx, Mainhard, Boor-Klip, & Brekelmans, 2017; J. N. Hughes, Cavell, & Willson, 2001; J. N. Hughes, Im, & Wehrly, 2014; J. N. Hughes, Zhang, & Hill, 2006). Such processes may be particularly relevant in classrooms with ethnically diverse student populations because social referencing may not only affect the evaluation of individual classmates. It might also influence the evaluation of the ethnic groups because children (as well as adults) tend to generalize their experiences with individual outgroup members to the outgroup as a whole (R. Brown & Hewstone, 2005; Stark, Flache, & Veenstra, 2013). Hence, it could be assumed that when students perceive favorable interactions between teachers and ethnic outgroup classmates, they will not only like these students more but also have more positive attitudes toward the ethnic outgroup in general. Conversely, when teachers are seen to have less favorable relationships with ethnic minority (or majority) classmates this may affect outgroup attitudes negatively. Teachers have been found to report less favorable relationships with certain groups of ethnic minority students (Spilt, Hughes, et al., 2012; Thijs et al., 2012), and this might contribute to less positive attitudes towards minority students.

Multicultural education: teacher norms and enactment of norms in relationships

Teaching about cultural diversity has received increasing attention, both in and outside of academia. One of the more prominent approaches in this regard is multicultural education. This type of education involves a framework for didactic and pedagogic practices to facilitate the academic success and psychosocial development of both minority and majority students (Banks, 2004). It entails teaching practices that require a sense of cultural responsiveness in all aspects of teaching and is assumed to be most effective when both content and practices positively address diversity. This implies that the norms that teachers convey about cultural diversity have most impact when their interpersonal behavior communicates a similar content. Some qualitative studies have revealed how individual teachers address cultural diversity in their curriculum as well as in their teaching practices (Gillborn, 1990; Meetoo, 2018; Roux, 2001) but little is known about how both aspects of teaching interact in their impact on students' outgroup attitudes.

I use the literature on social norms to derive specific expectations. This literature argues that attitudes are most effectively changed when norms about what ought to be done (prescriptive

or injunctive norms) are in line with the behavior of the normative agent (Smith & Louis, 2008; Staunton, Louis, Smith, Terry, & McDonald, 2014). Likewise, experimental studies on prosocial norms among children have shown that when these norms are not accompanied by corresponding behaviors, children are less likely to engage in sharing behaviors. Inconsistencies in norms and behavior, thus, seem to weaken the effectiveness of normative messages (Rice & Grusec, 1975; Rushton, 1975). Most likely, these inconsistencies produce a sense of cognitive dissonance which may be resolved by concluding that the inconsistency is socially acceptable, which makes it likely for people to not behave according to the norm (Mckimmie, Terry, Hogg, Manstead, & Spears, 2003). Applying these principles to multicultural teacher norms, teachers who communicate positive norms about diversity should show corresponding behaviors to that norm (positive interactions with ethnic minority students) for their students to develop outgroup positivity.

Research questions

The literature about the role of teachers in bringing about positive interethnic attitudes among their students focuses on the social norms teachers express about cultural diversity in the classroom without considering teacher's enactment of these norms in their relationships with students. I wanted to investigate whether and to what extent teachers affect their students' outgroup attitudes not only through their positive norms about diversity, but also through the affective dyadic relationships they develop with students. In this thesis I examined two types of affective relationships, namely students' own relationship with their teacher, and students' perceptions of the affective relationships between their teacher and their classmates. I formulated the following research question: *Are affective student-teacher relationships related to outgroup attitudes among majority students? (RQ3a)*. Moreover, I wanted to assess *to what extent this relation is independent of teacher norms about diversity? (RQ3b)*. Not much is known about the mechanisms that might explain why affective student-teacher relationships are related to outgroup attitudes of majority students. Based on the literature described above I therefore asked the question: *Can the relation between affective student-teacher relationships and outgroup attitudes be explained through reduced intergroup anxiety and motivations for openness towards cultural diversity? (RQ3c)*. These research questions will be addressed in *Chapter 4*.

In addition to examining how students' outgroup attitudes might be influenced by their personal relationship with teachers, I also want to explore how students' perceptions of

interpersonal relationships in the classroom might be associated with these attitudes. The literature on social referencing (Hendrickx, Mainhard, Oudman, Boor-Klip, & Brekelmans, 2017) suggests that students tend to take social cues from their teachers' interactions with classmates. Hence, I asked the question: *To what extent are students' outgroup attitudes related to perceived relationships between their teacher and majority and minority classmates? (RQ4a)*, and *Do these social referencing processes work similarly for ethnic majority and ethnic minority students? (RQ4b)*. Moreover, because much of the literature on teachers' influence on prejudice reduction among students has established that it is important for teachers to express positive social norms about cultural diversity, I want to investigate the interaction between teacher norms and student-teacher relationships. I therefore asked: *To what extent do expressed teacher norms about diversity interact with classmate-teacher relationships to influence outgroup attitudes? (RQ4c)*. These research questions will be addressed in *Chapter 5*.

1.3 Context of research and data sources

The research presented in this thesis was conducted in elementary schools across the Netherlands. In this country, children enter elementary school at the age of 4, and progress through 8 grades until they transition to secondary education. During their elementary school years, children are typically taught by the same teacher for the entire school year, until progressing to the next grade and, most often, a new teacher. Due to part-time contracts, some students are taught by two, rather than one teacher, who alternate weekdays. The prolonged contact over the course of the year allow teachers and students to create significant and stable forms of interaction which makes it important to investigate dyadic student-teacher relationships. As this research revolved around *dyadic* relationships, surveys were conducted among both teachers and students. These surveys required a sufficient level of comprehensive reading skills and were, therefore, only administered to students in the last three grades (6, 7 and 8) of elementary school (comparable to the 4th through 6th grades in the Anglo-Saxon system), when students are aged between 8 and 12 years old.

Regarding the ethnic diversity in Dutch elementary schools, trends show increasing diversity over the last years. Demographic developments, such as the expansion the number of second

and third generation migrants (CBS, 2018a; De Mooij et al., 2018), have caused elementary schools to become more ethnically diverse. Currently, about 18 percent of the elementary school student population has a non-Western migrant-origin background. Moreover, the percentage of first generation non-Western migrant youths who are starting their education in the Netherlands rose form 2 percent in 2013 to 7 percent in 2017 (Inspectie van het Onderwijs, 2019). This ethnic diversity is largely absent among the teacher population, as only around 3 percent of elementary school teachers have a non-Western migration background (Traag, 2018). This means that in most cases, ethnic minority students are being taught by teachers with an ethnic Dutch majority background.

Additionally, the ethnic composition of elementary schools is not evenly distributed across the Netherlands, within cities, or even within neighborhoods. This uneven distribution can largely be attributed to residential segregation, as migrant-origin communities tend to gravitate towards affordable neighborhoods of larger cities. However, studies have shown that 6 percent of all elementary schools in the Netherlands have an ethnic composition that deviates from that of their surrounding neighborhood (Karsten, Ledoux, Roeleveld, Felix, & Elshof, 2003). In larger cities such as the Amsterdam, this percentage is even at 25 percent (Karsten, Roeleveld, Ledoux, Felix, & Elshof, 2002). These deviations are often attributed to processes of parental school choice, socio-economic status and school practices (P. A. J. Stevens, Crul, Slootman, Clycq, & Timmerman, 2019). As a result, some teachers encounter classrooms with very few non-ethnic Dutch students, while other teachers may teach classrooms with many non-ethnic Dutch students, either with many different origins and nationalities or only a few.

The current research project included two large scale longitudinal data collections among teachers and students in grades 4 through 6 of elementary schools across the Netherlands. The first of these two datasets were collected in two waves between January and July of 2014 and was used in all four empirical chapters. Chapter 4 investigates only samples of ethnic majority students. This chapter consists of multiple studies and included the second dataset of the project which was collected in three waves from October 2015 until June 2016, and a third data source collected in May of 2013 as part of a former research project on intergroup helping behavior.

Dataset 1

Because many of the research questions of this dissertation compare ethnic majority and ethnic minority students (in *Chapters 2, 3* and *5*), an oversampling of ethnic minority students was required. Therefore, the selection procedure for schools was aimed at sampling schools in areas with sufficient percentages of inhabitants with a non-ethnic Dutch background. The selection followed a stratified procedure, first selecting provinces based on the percentage of inhabitants of non-ethnic Dutch origin (including both first- and second-generation migrants). Provinces were included if the minority population matched or exceeded the national average of 5 percent. This selection excluded the more remote provinces of the Netherlands (Zeeland, Drenthe, Friesland, and Groningen). In the second step, within these provinces, schools were selected with an ethnic minority student population of at least 5 percent.

In total 489 schools where contacted by email and phone, of which 18 participated in the study, which amounts to a 3.6 percent response rate. This low response rate, unfortunately, is not uncommon in the Netherlands (M. Zee, Koomen, et al., 2016). Within these 18 schools, 44 out of 81 4th to 6th grade teachers participated in the study. Non-participation was often explained in terms of already strenuous workloads or engagement in other research projects. All of the participating 44 teachers were of ethnic Dutch background.

In total, 888 students participated in the research by answering questions on ethnic identification, academic engagement, outgroup attitudes and the relationship with their teacher. In order to create dyadic student-teacher data, teachers where asked to fill in a questionnaire regarding 8 individual students within their classroom. These students were selected from the class attendance list by the research assistant, who was instructed to oversample ethnic minority students in order to achieve somewhat equally sized samples of minority and majority students. Of the participating students, all were between 9 and 13 years old and 50.8 percent had a non-ethnic Dutch background. The non-ethnic Dutch group predominantly consisted of students with a Turkish (24.9%), Moroccan (20.9%), Eastern European (13.8%) or Surinamese/Antillean (11.1%) background, and a large majority of them had lived in the Netherlands (83.7%) all their lives.

Dataset 2

The second dataset, used in chapter 4, was gathered among 800 students in 23 elementary schools across the Netherlands. In total 600 schools were randomly selected and contacted by email and phone. With these 23 schools, 58 teachers consented to participation, all of whom had an ethnic Dutch background. The 800 students that participated in the study were between 8 and 12 years of age and attended grades 4 through 6. In terms of ethnic background, most of the students had an ethnic Dutch background (45%), followed by students of Moroccan (10.7%), Turkish (8.2%), Surinamese (7.3%) and Antillean backgrounds (3,6%). *Chapter 4* only used the data of the 363 ethnic Dutch students in the sample, as this chapter focused on the outgroup attitudes of this particular group and whether student-teacher relationships are related to these attitudes. These students answered questions on their outgroup attitudes, the norms about cultural diversity they perceived being expressed by the teacher, and the interpersonal relationship with their teacher. If students had more than one teacher, they were randomly assigned to answer these questions about one of the teachers.

Dataset 3

The third dataset used in chapter 4 was part of a research project on outgroup attitudes and intergroup helping (Sierksma, Thijs, & Verkuyten, 2014a). The data was collected among 572 students from 32 ethnically diverse 4th to 6th grade classrooms within 8 elementary schools across the Netherlands. Again, because the focus of this chapter was on the outgroup attitudes of ethnic Dutch students, only those students who could be identified as ethnic Dutch were selected. This categorization was based on students' ethnic self-definition and country of birth of both parents; students were therefore only categorized as Dutch if both parents were born in the Netherlands and students also self-identified as Dutch. Within this subsample of 389 students, students were between 8 and 13 years old (M = 10.59, SD = 1.03), and 48% was female. These students answered questions on the interpersonal relationship with their teacher, their own popularity in the classroom, ethnic identification, and outgroup attitudes.

1.4 Main findings, overall conclusions, and discussion

In this section, I will discuss the main findings of this dissertation and relate them to the two overarching challenges teachers face when teaching diverse student populations; the challenge of teaching students of diverse backgrounds and the challenge of teaching about cultural diversity. The central premise of this dissertation has been that for both of these challenges interpersonal, dyadic relations between teachers and students play a significant role.

1.4.1 Teacher challenge 1: Teaching students of diverse cultural backgrounds

Teaching diverse student populations may provide challenges for teachers, particularly when teachers and students have different cultural backgrounds. The first challenge this dissertation wanted to address is that of *teaching ethnically diverse students* in ways that improve their academic achievement. Previous research has established that dyadic student-teacher relationships characterized by emotional support are beneficial for children's academic adjustment (see Roorda et al., 2017). This seems particularly relevant for ethnic minority students, given the fact that teachers sometimes experience less favorable relationships with these students (J. N. Hughes et al., 2005; Saft & Pianta, 2001), and that ethnic minorities tend to underperform academically compared to ethnic majority student (e.g. Heath et al., 2008; Portes & MacLeod, 1999). Previous studies have mainly been concerned with the affective aspect of the dyadic relationships between students and teachers and less with how teachers may be able to support students of different ethnicities through other aspects of their teaching, such as teacher self-efficacy. I examined differences between ethnically congruent and ethnically incongruent student-teacher dyads in terms of both affective relational quality and teachers' student-specific self-efficacy, and by studying the consequences of both relationship aspects for students' academic engagement. My research offers novel insights in the extent to which teachers feel they are able to provide equal support to students of ethnic minority backgrounds compared to their ethnic majority classmates.

The findings of *Chapters 2* and *3* illustrate the complexity of ethnic differences in dyadic student-teacher relationships, particularly for teacher self-efficacy. The results described in *Chapter 2* revealed that teachers feel somewhat less self-efficacious with ethnic minority students. It should be noted, however, that students' ethnic background explained only a small part of the variance in teacher self-efficacy. In fact, students' externalizing behavior was found to be a much stronger and more relevant predictor of student-specific teacher self-efficacy.

Nevertheless, the small, negative relation with ethnicity is in line with previous research that has found that teachers may hold more negative perceptions of ethnic minority students, both in the affective aspects of student-teacher relationships (J. N. Hughes et al., 2006; Saft & Pianta, 2001) and in academic expectations (Glock et al., 2013; Irizarry, 2015; Pigott & Cowen, 2000; Tenenbaum & Ruck, 2007; Van den Bergh et al., 2010).

These results lead to the question why teachers may feel somewhat less efficacious with minority students (or less affective). Previous research has related these ethnic differences to potential biases among teachers (Kozlowski, 2015; Pigott & Cowen, 2000) or to cultural miscommunications and misunderstandings (Saft & Pianta, 2001; K. I. Van der Zee et al., 2004). In my research (*Chapter 2*) I found that ethnic differences in teacher self-efficacy are most pronounced when students display internalizing problem behaviors. I did not find a similar effect for externalizing problem behaviors. Teaching students with internalizing problems can generate uncertainty because it requires a proper understanding of the behavior and its underlying causes, which might be more difficult when teachers and students do not share the same ethnic background (Kunemund et al., 2020; Pigott & Cowen, 2000; Saft & Pianta, 2001). Moreover, the fact that there is not a similar effect for externalizing problem behaviors suggests that dealing with internalizing problems requires more subtle and culturally sensitive pedagogic skills than dealing with externalizing problems (Le Roux, 2002; Wubbels, Den Brok, Veldman, & Van Tartwijk, 2006). The findings in this thesis, thus, indicate that processes of misunderstanding rather than biases are important. However, these explanations are likely not mutually exclusive and more extensive research should determine to what extent and when biases and misunderstandings can account for ethnic differences in dyadic student-teacher relationships.

Perceived teacher self-efficacy with ethnic minority students was also found to marginally depend on the ethnic composition of the classroom. Teachers in more ethnically diverse classrooms, were found to experience somewhat more self-efficacy with their minority- compared to majority students. Possibly, teachers in more diverse classes have more experience in teaching a diverse student population and, therefore, feel better equipped in teaching ethnic minority students.

Secondly, the results described in *Chapter 3* show that supportive dyadic relationships between students and teachers are of some significance for students' school outcomes. Using a longitudinal autoregressive panel design, I estimated to what extent self-efficacy and affective qualities of the student-teacher dyad are related to academic engagement at wave 2, controlling for autoregressive stability effects (wave 1). Both the affective qualities of the student-teacher relationship and teacher self-efficacy were found to be associated with students' academic engagement over time, as more conflict and lower teacher self-efficacy were related to lower academic engagement. Relational closeness, however, was not associated with students' engagement. Apparently, the absence of conflict in the student-teacher relationship was more beneficial than the presence of closeness and warmth. This is consistent with earlier research (Roorda et al., 2017), and the notion of "bad is stronger than good", which means that people tend to be affected more by negative than positive situations and events (see Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001).

Interestingly, the two aspects of the dyadic relationship also interacted with each other. Based on attachment theory (Ainsworth, 1989; Verschueren & Koomen, 2012), I assumed that lacking a foundation of security and trust limits the effect of the support of self-efficacious teachers on their students' academic engagement. Our findings seem to partly corroborate this hypothesis, but only in interaction with relational conflict. First, for both minority and majority students, relational conflict was found to weaken the otherwise positive influence of teacher self-efficacy on students' engagement. This indicates that students can profit less from their teachers' self-efficacy when they simultaneously experience poor relationship quality. This findings adds to the previous literature that established the negative association between relational conflict on teacher self-efficacy (M. Zee et al., 2017) and supportive teaching practices (Thijs, Koomen, & Van Der Leij, 2008), by showing that even when teachers feel self-efficacious with individual students, they are only able to use this efficacy to benefit student engagement if their relationship with the student lacks conflict.

Second, relational closeness also interacted with teacher self-efficacy, but for this there were ethnic group differences. For both ethnic minority and ethnic majority students, teacher self-efficacy was only weakly related to engagement when experiencing a close relationship with their teachers. For ethnic minority students, however, teacher self-efficacy was most effective in absence of that closeness. Because these relationships are somewhat deficient in affective

support, efficacious teachers might be able to compensate for this deficiency with support in other domains in other to improve student engagement of ethnic minority students. I do not have a straight-forward explanation for why this effect was not found for ethnic majority students. I suspect it may be related to a different interpretation of the relational quality with the teacher, as findings showed that for majority students lacking closeness in the relationship tend to coincide with conflict, while for minority students these two aspects were only weakly correlated. Potentially, minority students experience less close relationships in a more neutral way. A neutral rather than negative interpretation of the student-teacher relationship might allow for teacher self-efficacy to substitute the support that normally is derived from a close student-teacher relationship.

Overall, these findings demonstrate that ethnic majority teachers can find it somewhat more difficult to provide equal support to students of ethnic minority backgrounds compared to their ethnic majority classmates. Where previous research had established this with regard to affective aspects of dyadic student-teacher relationships, this dissertation demonstrates that this is also the case with regard to teacher self-efficacy in dyadic relationships. Moreover, studies have established that this affective teacher support is beneficial for academic student outcomes. My research additionally shows that the support generated through self-efficacy in the student-teacher relationship is also positively related to students' school outcomes. Further, these affective and self-efficacy aspects of the relationship interact in their relation to academic outcomes, as conflict can hinder students from benefitting from their teachers' efficacious support. Given that teachers may find it more difficult to support minority students, these ethnic differences might contribute to ethnic differences in academic achievement. Further research would be required to test the degree to which affection and self-efficacy in dyadic relationships explain the achievement gap between ethnic majority and ethnic minority students.

1.4.2 Teacher challenge 2: Teaching about cultural diversity

In addition to the challenge of teaching diverse student populations, I addressed the challenge of *teaching students about diversity* in ways that contribute to positive interethnic relations. Teachers have the responsibility of helping students to navigate their culturally diverse settings and helping them to develop positive intergroup relations. It is often argued that diversity teaching is most effective when teachers not only express positive norms about diversity but also enact

those norms in their own teaching practices. In this sense, positive affective student-teacher relationships in ethnically diverse classrooms can be viewed as a form of 'teaching by example'. Moreover, high-quality relationships with teachers could provide students with a sense of relational security that could make them more open to ethnic others. Accordingly, I examined teachers' influence on students' outgroup attitudes from a dyadic relational perspective, providing new insights into the ways in which teachers may contribute to positive interethnic relations.

The results described in *Chapters 4* and *5* demonstrate that affective student-teacher relationships may influence students' attitudes about ethnic outgroups, and that this is the case for both majority and minority students. I investigated two mechanisms for explaining this. First, as described in chapter 4, I conducted three studies examining the association of close student-teacher relationships. These studies involved two different measures of outgroup attitudes (study 1), controlled for perceived multicultural teacher norms (study 2), and assessed possible mediating mechanisms (study 3). The findings revealed that affective student-teacher relationships were related to positive outgroup attitudes among ethnic Dutch students, regardless of teacher norms and of the type of measurement of outgroup attitudes. Moreover, the association between relational closeness and outgroup attitudes was mediated by internal motivations for intercultural openness but not by decreased intergroup anxiety. Thus, rather than reducing intergroup anxiety (Bohlin et al., 2000; Brumariu & Kerns, 2008), the relational security generated by affective relations with teachers seems to motivate students to develop an openness to other groups, which in turn was related to more positive outgroup attitudes. The importance of openness towards other groups, is found to be in line with literature about motivations to reduce prejudice, which has found that when people find it important to be open to other groups, they tend to hold more favorable outgroup attitudes (see Legault et al., 2007; Plant & Devine, 1998; Thijs et al., 2016).

As a second mechanism for why affective student-teacher relationships are related to students' outgroup attitudes, concerns the observation of dyadic relations between teachers and classmates in ethnically diverse classrooms. I investigated teacher-classmate relationships as a form of 'teaching by example' which conveys values and norm about ethnic diversity to students. I used a longitudinal autoregressive panel design and estimated to what extent students' perceptions of positive teacher relationships between minority versus majority

classmates influence their outgroup attitudes at wave 2 controlling for outgroup attitudes at wave 1. The study in chapter 5 revealed that both ethnic minority and ethnic majority students in culturally diverse classrooms have more positive attitudes about ethnic outgroups when they perceive their teacher to have more positive relationships with ethnic outgroup classmates. This is consistent with social referencing theory (Feinman, 1982; Walden & Ogan, 1988) in which children observe the behavior of teachers in search for cues for whom to like or dislike (Hendrickx, Mainhard, Boor-Klip, et al., 2017; J. N. Hughes et al., 2001, 2014, 2006). It indicates that students use their observations of teachers' interpersonal relationships with classmates as a basis for their own ethnic attitudes.

However, my findings also reveal that students combine this information with the more explicit norms about cultural diversity expressed by their teacher. When students perceived their teacher to only occasionally express positive norms about diversity, while at the same time they perceived their teachers to interact positively with majority classmates, this negatively affected the outgroup attitudes of majority and minority students alike. However, when teachers were perceived to more frequently express multicultural norms, their perceived positive interactions with majority classmates predicted positive outgroup attitudes in both groups. Similarly, ethnic majority students had more favorable outgroup attitudes when perceiving positive teacher relationships with minority classmates, but this was only the case in the absence of perceived positive teacher norms. When teachers were perceived both to express positive multicultural norms and to have positive relationships with minorities, ethnic majority students actually reported more negative views about minorities. These findings suggest that teachers need to find a balance between expressing positive norms and not appearing to favor either majority or minority groups. For minority students, teacher norms about cultural diversity are needed to prevent perception of ingroup favoritism by teacher when interacting with majority students. This resembles findings in previous studies (Dovidio et al., 1997; Nesdale et al., 2010) indicating that a lack of multicultural teacher norms can be interpreted by ethnic minority students as an unsupportive classroom environment in which positive interactions between a majority teacher and majority classmates are seen as a form of majority ingroup preference. However, for majority students, teacher norms about cultural diversity need to be weaker to prevent the perception of outgroup favoritism by teacher when interacting with ethnic minority students. Indeed, research has found that multicultural values can be perceived as focusing on ethnic minority groups only and thereby as excluding ethnic majority members (see Correll et

al., 2008; Plaut et al., 2011; Rattan & Ambady, 2013). Both findings indicate that students are using information about intergroup relations from what teachers are communicating as well as from the dyadic teacher-classmate relationships they are perceiving. Culturally diverse classrooms might also be environments where students are concerned with the social hierarchies between different ethnic groups. This is in line with literature that argues for an 'inclusive multiculturalist' teacher norm in which ethnic majority groups also feel included (Plaut et al., 2011). This way, ethnic minority students can get the normative support they need, while ethnic majority students do not feel excluded.

In sum, teachers' affective relationships with their students can positively influence how these students feel about ethnic outgroups. Affective interpersonal relationships with students benefit outgroup attitudes of both ethnic minority and ethnic majority students directly. But they also are indirectly related to students' attitudes because students observe relationships between teachers and classmates and use the behavioral norms they derive from these relationships to inform their own outgroup attitudes. Thus, in order for teachers to prevent appearing to favor certain ethnic groups, it seems important to communicate multicultural norms that are perceived to be inclusive of both minority and majority students.

1.5 Limitations and directions for future research

In this section I discuss some of the main limitations of the work in this dissertation. Based on these limitations I also take the opportunity to suggest some potentially fruitful areas for future research and discuss how this research might deepen our understanding of the importance of dyadic student-teacher relationships for academic engagement and interethnic relations.

Mechanisms for differential experiences in ethnically incongruent relationships

This dissertation has established that ethnic Dutch teachers experience somewhat less self-efficacy with non-ethnic Dutch students compared to ethnic Dutch students, and also found some ambiguity in how the affective student-teacher relationship is experienced by minority students. Because the differences in teacher self-efficacy were more pronounced when students displayed internalizing problem behaviors, I concluded that these differential experiences might be increased by the miscommunications internalizing problems can generate. Other studies

have suggested that differential experiences might be caused by either miscommunication or by (unconscious) biased perceptions of teachers (Saft & Pianta, 2001; Thijs et al., 2012). Yet, I was not able to test which of these underlying mechanisms explains the differential experiences of both students and teachers. Some studies have used measures of explicit and implicit attitudes among teachers to explain differential treatments and found that implicit measures tend to be more predictive of differential teaching behaviors (Glock & Kovacs, 2013; Van den Bergh et al., 2010). However, there are few studies that examine miscommunications in ethnically incongruent student-teacher relations (Tosolt, 2010). Future research could, for instance, include vignettes describing an interaction between a student and a teacher, varying the ethnic background of the student and teacher, and then have students and their teachers assess the situation to detect possible differences in interpretation. By including assessments of miscommunication and biases, we might be able to get a better understanding of why students and teachers may experience ethnically incongruent relationships as less favorable and less close.

Sample and data characteristics

The differential experiences described in this dissertation have been discussed in terms of ethnic incongruence. However, for a full test of the impact of ethnic incongruence we would also need to study affective student-teacher relationships between ethnic minority teachers and ethnic majority students. Although the teacher population in elementary schools in the Netherlands is slowly diversifying, still only three percent of teachers have a non-Western migration background (Traag, 2018). This means that future studies might have to considerably oversample this group of ethnic minority teachers. Nevertheless, it would be interesting to investigate ethnic incongruence in relations between students and ethnic minority teachers to assess whether differential experiences are indeed based in cultural differences or whether minority and majority status differences are also a significant factor. Some studies in the US suggest that incongruence affects ethnic majority students as well, however disparities with Black or Hispanic students were found to be larger (Blake et al., 2016). A similar pattern might also exist in Europe and in the Netherlands in particular.

Another issue related to the data used in this research is that there was not a large enough sample to compare ethnic minority students from various cultural backgrounds. This would be an interesting and important pathway for future research as studies have shown that teachers

can experience less favorable relationships with students of some but not all ethnic minority groups in their classroom. In the US a study revealed that teachers experience less positive student-teacher relationships with African American students compared to White students, but also compared to Hispanic students (J. N. Hughes et al., 2005), and in the Dutch context teachers were found to experience less favorable affective student-teacher relationships with Moroccan-Dutch but not with Turkish-Dutch students (Thijs et al., 2012). Similar ethnic differences may occur with regard to self-efficacy in student-teacher relationships. If this is indeed the case then this may have implications for the explanatory mechanisms for ethnic differences; are teacher more biased towards particular ethnic groups, and/or do cultural practices of specific ethnic groups impair communication?

Finally, I need to address the issue of causation. In the studies I conducted all statistical effects are described in directional terms. By testing for reverse causation and including two studies in which I present longitudinal research with two waves, I have obtained support for the proposed directionality of the effects. However, the data do not allow for causal interpretations due to the possibility of stable and time-varying third-variables (Hamaker, Kuiper, & Grasman, 2015). It is also important to note that most of the data was gathered halfway through the school year and the longitudinal analyses revealed strong autoregressive effects, indicating substantial stability between the two time points. This lack of variability may have contributed to the relatively small effect sizes. Future studies may be well advised to collect their data at the beginning of the school year when relationships between students and teachers are still in the process of being established.

Inclusive multicultural teacher norms and multiple perspectives

Another avenue for future studies is to investigate inclusive multicultural teacher norms. The findings described in this dissertation suggest that affective student-teacher relationships are positively related to students' outgroup attitudes, but also revealed some important conditions for this beneficial relation. First, the relation was found to depend on teacher norms about cultural diversity and this suggests that teachers may need to strike a balance between making ethnic minority students feel supported by what they teach about diversity, while at the same time not excluding ethnic majority students. An inclusive multiculturalism has been suggested in previous literature (Plaut et al., 2011) and this line of research seems to resonate with literature on common ingroup identities (Dovidio, Gaertner, Anastasio, Bachman, & Rust,

1993) that in recent years has also concluded that a common denominator that includes all ethnicities, and in which all ethnic groups can retain some of their group identity is most beneficial for outgroup attitudes (Dovidio, Gaertner, & Saguy, 2007; Dovidio, Gaertner, Ufkes, Saguy, & Pearson, 2016). Moreover, research has shown that perceptions of equal treatment by teachers can provide a buffer against the negative effects of perceived discrimination (Baysu, Celeste, Brown, Verschueren, & Phalet, 2016). I believe it might be fruitful to apply these lines of research to the educational context to investigate if more inclusive teacher norms, that recognize all ethnic groups, facilitate positive interpretations of supportive teacher behavior.

In line with and in addition to inclusivity, future research may also want to include multiple perspectives. The findings in this dissertation illustrate that the impact of student-teacher relationships and teacher norms can depend on the ethnic background of who is perceiving or experiencing the relationship. Other studies have shown that teachers and student can have different interpretations of their dyadic relationships (Wu et al., 2010; M. Zee & Koomen, 2017). Dyadic relationships have at least two perspectives, given that they are experienced by both the teacher and the student. But in a classroom context, dyadic relationships are also observed by the other students in the room, as my findings show. Research on relationships between teachers and students can, thus, become quite complex, and it will not always be possible or desirable to include all of these perspectives. Yet, in school-based research including a multiplicity of perspectives is almost inevitable.

1.6 Practical implications

The findings of this dissertation have been discussed in light of the possible contributions they make to scientific research. In this section I provide some thoughts on how the results of my research might be translated to the teaching context. The thoughts I present here are related to the challenges teachers face in teaching a diverse student population. Rather than full-fledged concrete suggestions for teaching practices, I highlight focus areas which might be helpful to teachers or educators to rethink or reorient some of their teaching practices.

Challenge 1 Teaching a diverse student population

Teachers tend to be well aware of the importance of positive interpersonal relationships with their students for student academic and psychosocial development. In this regard, the findings

of this thesis may not present any surprises. But beyond the direct benefits of having close dyadic relationships, the findings suggest that teachers also feel differently capable or efficacious in their interactions with individual students and that these feelings can affect students' academic engagement. Feeling capable in teaching a particular student can help teachers to engage that student with their schoolwork. But my research has also shown that when the interpersonal connection with the student tends to be conflictual, a teachers' sense of capability is not very relevant for students' academic engagement.

One implication of this finding is that teachers or educators may want to pay particular attention to improving the dyadic interactions between student and teacher, especially in relationships that are somewhat problematic. Studies have not yet been able to determine if teacher self-efficacy is negatively affected by relational conflict or the other way around (Kunemund et al., 2020; M. Zee et al., 2017), but I tend to think the affective and efficacy aspects of the relationship develop simultaneously and in mutual interaction. I would, therefore, suggest assessing where and why conflict occurs but also in which domains of teaching a teacher feels less capable. Alleviating conflict and strengthening feelings of capability may both be helpful to restore teacher support and therefore, hopefully, improve the academic development of the students. This may be especially important for students at risk for academic underperformance, such as ethnic minority students and majority students from low socioeconomic backgrounds.

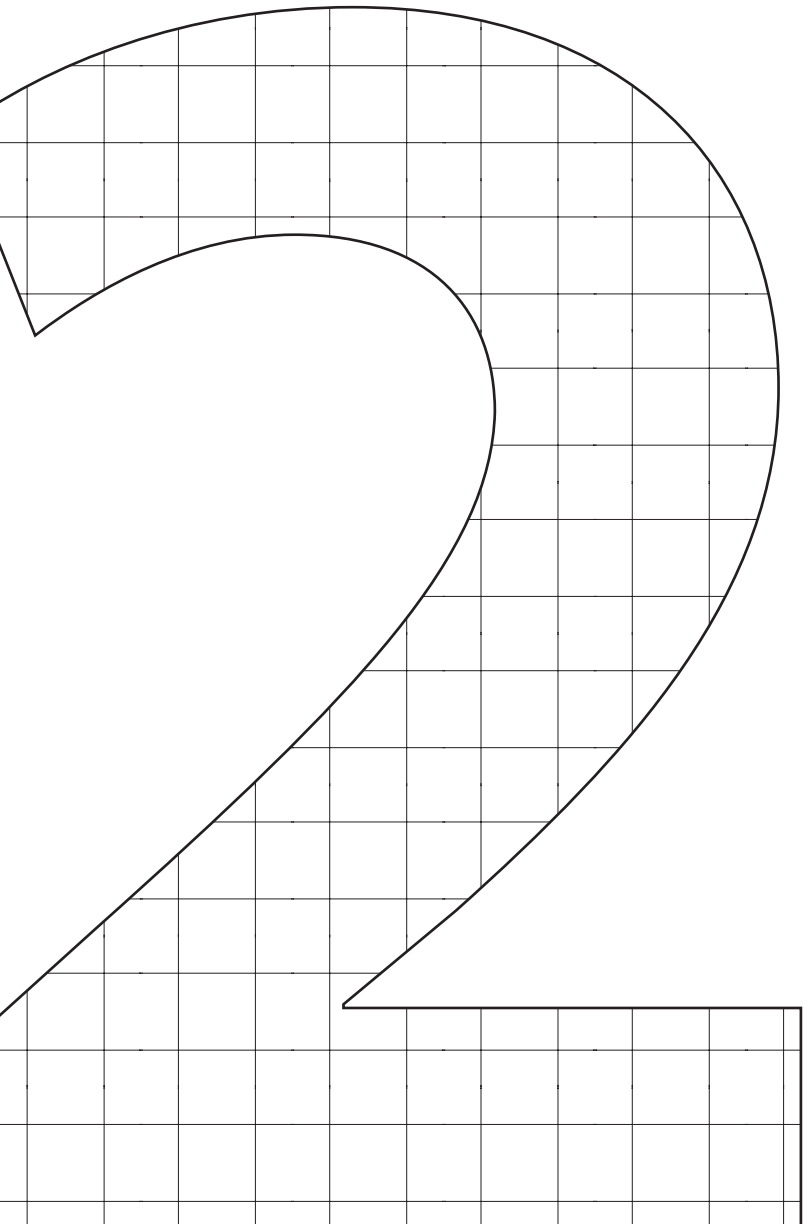
I think it is also important to reiterate that problematic relationships are not simply caused by either student or teacher characteristics or behaviors, but that they are formed in interaction. This also implies that when someone in the relationship alters their input in the interaction, the relationship is likely to alter. Some researchers have developed interventions to improve the student-teacher relationship by having teachers reflect on strained and difficult relationships (Bosman, Zee, & Koomen, 2019). And such reflections have been shown to improve the quality of the relationships between primary school teachers and young children (Spilt, Koomen, Thijs, & Van der Leij, 2012). Hopefully, such interventions may prove helpful among teacher and older children as well, in which case reflective interviews may be used to improve student-teacher relationship in the future.

Although dyadic student-teacher relationships are not simply caused by certain student characteristics, the findings of this dissertation do show that students' ethnic background can play some role in the degree to which teachers feel capable of teaching a student. Moreover, I found that this was particularly the case if this student was perceived to experience internalizing problem behavior. This may indicate that teachers find it more difficult to support minority students than majority students with such behaviors. This might, on the one hand, be related to difficulties in signaling and evaluating internalizing problems in minority students but may also reflect difficulties in addressing those behaviors with parents. Teachers may propose interventions to address the problem behavior that are common from the perspective of the majority culture, but this may not always resonate with how minority parents would address the behavior of their child. Given that these situations may be prone to miscommunication, it might be helpful for teachers to receive support in this matter. Colleagues could make such challenges a matter of group discussion, in order to collectively come to possible approaches, and teachers may want to consult a culturally sensitive school psychologist. In any case, I think it would be advisable for teachers to be attentive to the possibility that addressing problem behaviors with ethnic minority students might require a different approach compared to majority students.

Challenge 2 Teaching about diversity

Turning to the question of how to teach about cultural diversity, I would suggest that educators need to be aware of the different ways teachers can have exemplary roles in their classroom. Students tend to see teachers as authority figures and as such, students look to them for guidance in a plethora of domains. Dealing with ethnic diversity is one of those domains. I found that teachers have an impact on their students' outgroup attitudes, both through the norms they verbally express and through the norms they behaviorally express by interacting with majority and minority students in the classroom. Being aware of the influence teachers can have also entails responsibly choosing a strategy for which norms are being expressed. And I would advise teachers to consider the way in which interethnic relations in the classroom play a role. The results of my research indicate that when students perceive much positive interactions between their teacher and students of ethnic outgroups, they tend to be less positive about these outgroups. This tended to happen when students perceived positive relationships between their teacher and the ethnic outgroup while not feeling supported by the multicultural teacher norms that were being expressed. However, when students felt supported

by the teacher norms, teachers' positive relationships with outgroup classmates did not have adverse effects. It thus seems important to express norms that are supportive of all ethnic groups in the classroom. Consistent with other studies (e.g. Plaut et al., 2011), my findings suggest that positive teacher norms about multiculturalism and ethnic diversity can be experienced as being exclusive for majority students. I propose that, instead, teachers opt for a teaching strategy in which they combine positive student-teacher relationships with a more inclusive multicultural norm in which ethnic majority students are explicitly included as one of the ethnic groups that contributes to diversity. This may be most beneficial for students' attitudes about ethnic diversity. It might be helpful for teachers to receive the tools and support they need to implement more inclusive multicultural teaching practices. And although teacher training programs in the Netherlands do pay attention to teaching in diverse classrooms, research has indicated that these programs may lack discussion of social inequalities in the classroom and intergroup relations (Gaikhorst, Post, März, & Soeterik, 2020; Hermans, 2002; Severiens, Wolff, & van Herpen, 2014). Thus, it might be worthwhile to develop and include methods for more inclusive multicultural teaching practices into curricula for teacher training programs.



Chapter 2

Teaching in ethnically diverse classrooms: Examining individual differences in teacher self-efficacy [6]

Abstract

Using data of 40 native Dutch teachers and their native majority (N = 112) and ethnic minority students (*N* = 180), this study examined to what extent teachers experience differences in self-efficacy in teaching individual majority and minority students. We hypothesized that teachers would feel less self-efficacious in relation to ethnic minority students and that the difference in self-efficacy would be more pronounced when ethnic group differences are more salient (i.e., in the context of behavioral problems, ethnically less diverse classrooms, and for teachers with relatively high ethnic identification). Our results show that teachers feel somewhat less self-efficacious with ethnic minority- than with majority students. And the difference in self-efficacy with minority versus majority students was more pronounced in relation with internalizing problem behavior and somewhat more distinct in classrooms with relatively few ethnic minority students. The findings indicate the importance of a student specific assessment of teacher self-efficacy in diverse school contexts.

[6] A slightly different version of this chapter has been published as Geerlings, J., Thijs, J. T., & Verkuyten, M. (2018). Teaching in ethnically diverse classrooms: Examining individual differences in teacher self-efficacy. *Journal of School Psychology, 67*, 134–147. https://doi.org/10.1016/j.jsp.2017.12.001. Geerlings wrote the main part of the manuscript and conducted the analyses. Thijs and Verkuyten substantially contributed to the manuscript. The authors jointly developed the design of the study.

2.1 Introduction

The concept of teacher self-efficacy refers to teachers' beliefs in their ability to bring about desired student outcomes (Guskey & Passaro, 1994) and it is a powerful predictor of higher student motivation (Schunk, 1991) and academic achievement (Caprara, Barbaranelli, Steca, & Malone, 2006; Ross, 1992), as well as less teacher stress and burnout (Schwarzer & Hallum, 2008; Wang, Hall, & Rahimi, 2015). The positive effects of self-efficacy are commonly explained with Bandura's (1997) self-efficacy theory, which states that self-efficacious people are more task-involved and persistent in the face of obstacles, and thus result in positive and effective teachers' classroom behaviors. Recently, Zee and Koomen (2016) conducted a review of 165 research papers, which indeed revealed positive links between teacher self-efficacy and instructional support, classroom organization and emotional support. Moreover, some of the studies in their review tested and found indirect effects on teacher well-being and student academic adjustment via teachers' behaviors.

Until recently, few studies have investigated teacher self-efficacy in ethnically diverse classrooms (Siwatu & Starker, 2010; Tucker et al., 2005). Yet, studies on student-teacher interactions have shown that teachers – who typically belong to the ethnic majority group (e.g. Hughes, Gleason, & Zhang, 2005; Thijs, Westhof, & Koomen, 2012) – tend to report differential experiences with ethnic minority and majority students. For example, teachers appear to hold biased expectations towards minorities (Tenenbaum & Ruck, 2007; Van den Bergh, Denessen, Hornstra, Voeten, & Holland, 2010) and to have less favorable perceptions of their relationships with ethnic minority versus majority students (Hughes et al., 2005; Thijs et al., 2012). It is unclear, however, whether teachers also experience different levels of self-efficacy in relation to students of different ethnicities. Given the increasing ethnic diversity in schools and the importance of teacher self-efficacy for effective education, a closer investigation of these questions is timely and pertinent.

The present study, therefore, examines whether teachers' sense of self-efficacy with individual students depends on the ethnicity of those students. We gathered data in the Netherlands, where elementary school children typically have one or two teachers the whole year round (Thijs & Verkuyten, 2014), and we investigated native Dutch primary school teachers (grades

4-6) in relation to students who were either native Dutch (ethnic majority) or of non-Western immigrant-origin (ethnic minority). In the Netherlands, students of non-Western backgrounds do relatively poorly in school on a variety of indicators (Gijsberts, Huijnk, & Dagevos, 2012). For instance, they score lower on standardized tests at the end of primary school, more often attend vocational rather than academic tracks and overall achieve lower levels of educational degrees, than their peers with native-born parents (Van de Werfhorst & Van Tubergen, 2007). Moreover, people from Turkish, Moroccan, Surinamese, or Antillean immigrant-origin (the largest groups in our sample) face relatively high levels of discrimination in the Netherlands, and have low socioeconomic status (SES) as they experience, for instance, high levels of unemployment and poorer housing (Huijnk, Gijsberts, & Dagevos, 2014).

Rather than measuring teachers' self-efficacy with their students or the classroom in general (Chan, 2008; Gibson & Dembo, 1984; Tschannen-Moran & Woolfolk Hoy, 2001), we used a newly developed instrument to assess teachers' sense of self-efficacy at the level of individual students (M. Zee, Koomen, et al., 2016). Thus, we focused on possible differences in teacher's self-efficacy in relation to individual majority and minority students. Additionally, we examined whether the difference in self-efficacy depends on student problem behavior, teacher ethnic group identification and the ethnic classroom composition.

2.2 Theory

Teacher self-efficacy

Self-efficacy has proven to be a very useful concept for understanding the motivations and behaviors of individual teachers. However, educational researchers have operationalized teacher self-efficacy in different and sometimes contrasting ways (Klassen, Tze, Betts, & Gordon, 2011; Tschannen-Moran & Woolfolk Hoy, 2001). Bandura, who coined the term, defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (1997, p. 3), and in his social cognitive theory (1977) he distinguished these beliefs from so-called *efficacy expectations*, i.e. the convictions that the required courses of action, if adequately performed, would indeed lead to the desired outcomes. Paralleling this distinction, Gibson and Dembo (1984) developed a teacher self-

efficacy measure, which measured both *personal teaching efficacy*, involving teachers' personal beliefs about their ability to influence students' learning and behavior, and *teaching efficacy*, involving teachers' convictions that it is generally possible for teachers to influence their students. Although teaching efficacy is an integral component of teacher self-efficacy in Gibson and Dembo's model, later researchers have questioned its value and focused on personal efficacy only (Klassen et al., 2011; Tschannen-Moran & Woolfolk Hoy, 2001).

Next, whereas teacher self-efficacy was initially considered to be a general teacher characteristic (Gibson & Dembo, 1984; Schwarzer & Jerusalem, 1995) later research has examined how self-efficacy can vary within teachers. It has been shown, for example, that teachers can experience different levels of self-efficacy when teaching different subjects and different types of students (Raudenbush et al., 1992; Ross et al., 1996). Another line of research has examined teacher self-efficacy in specific domains of teaching (Tsouloupas et al., 2010; Woolfolk Hoy & Burke Spero, 2005). The most prominent work in this field was conducted by Tschannen-Moran and Woolfolk Hoy (2001) who developed a domain-specific instrument pertaining to three unique but interrelated domains of teaching: instructional strategies, classroom management, and student engagement. Recently, Zee and colleagues (2016) used Tschannen-Moran and Woolfolk Hoy's (2001) instrument to construct a domain-specific measure for teacher self-efficacy at the student level. They added a fourth domain of emotional support – which is considered important for students' academic engagement and achievement (Roorda et al., 2011) – and they formulated items that pertained to individual students rather than students in general (e.g., "How much can you do to adjust your lessons to the proper level for this particular student?" rather than "How much can you do to adjust your lessons to the proper level for students?"). The study showed that teachers do not only experience different levels of self-efficacy in varying domains of teaching but also with individual students in their classrooms (Zee, et al., 2016). Given the novelty of this approach there has been no research on the effects of this student-level self-efficacy yet, but it stands to reason that it affects teachers' student-specific classroom behavior and thus helps to explain the educational adjustment of individual students (see Zee & Koomen, 2016).

The role of student ethnicity

Very little is known about teacher self-efficacy in relation to students from different ethnic backgrounds. The available research has taken a between-teacher approach by focusing on

whether teachers feel generally self-efficacious in dealing with a diverse group of students (Siwatu, 2007; Tucker et al., 2005). Although such an approach is clearly relevant, it neglects the distinction between different domains of teaching and it cannot be used to determine whether the same teacher experiences different levels of self-efficacy while interacting with individual ethnic minority versus ethnic majority students. In the present study, we used Zee et al.'s (2016) measure to examine teachers' self-efficacy with ethnic minority and majority students across the domains of behavioral management, student engagement, instructional strategies, and emotional support.

It is reasonable to expect that students' ethnicity is one of the characteristics that can create differential experiences in teacher self-efficacy. Several studies in Europe and the United States have shown that, compared to majority group students, teachers report lower expectations for students from (some) minority groups (Glock et al., 2013; Irizarry, 2015; Pigott & Cowen, 2000; Tenenbaum & Ruck, 2007; Van den Bergh et al., 2010) and less positive interpersonal relationships (Hughes et al., 2005; Spilt, Hughes, Wu, & Kwok, 2012; Thijs et al., 2012). These findings can be related to the notion of ethnic incongruence: as teachers often belong to the ethnic majority, their relations with ethnic minority students are incongruent (Howes & Shivers, 2006; Saft & Pianta, 2001). In incongruent relationships, teachers and students typically have different cultural backgrounds with the related differences in norms and expectations which make miscommunications and misunderstandings likely (Pigott & Cowen, 2000; Saft & Pianta, 2001; Van Der Zee, Van Oudenhoven, & De Grijs, 2004; Zimmerman, Khoury, Vega, Gil, & Warheit, 1995). In addition, teachers' judgments, and experiences of ethnically or racially incongruent student interactions might be affected by their social identity concerns. According to Social Identity Theory (SIT; Tajfel & Turner, 1979)), people are motivated to make evaluative distinctions between their in-group (group they belong to) and out-groups (to which they do not belong), and this could explain why teachers sometime have biased perceptions of ethnic out-group versus in-group children. Indeed, direct tests of the incongruence hypothesis have shown that it is the combination of teacher and student ethnicity (or race) rather than students' ethnicity (or race) alone that can predict teachers' assessments and perceptions of minority versus majority students (Driessen, 2015; Saft & Pianta, 2001; but see Ewing & Taylor, 2009 and Pigott & Cowen, 2000). Furthermore, research demonstrates that negative relationships and negative affect hinder teacher self-efficacy (Yoon, 2002; Zee, de Jong, & Koomen, 2015) because these experiences are an important source of information about one's

capability to effectively respond to students (Pianta et al., 2003; Spilt et al., 2011). Thus, across all teaching domains, we expected the ethnic majority teachers to experience less self-efficacy in teaching ethnic minority compared to ethnic majority students.

Conditions for differential self-efficacy

There are several conditions that may affect teachers' sense of self-efficacy with ethnic minority versus majority students. Here, we focus on the (perceived) problem behavior of the students, teachers' Dutch identification, and the proportion of ethnic minority children in the classroom. These three conditions might increase the salience of ethnic group boundaries for teachers, and therefore were expected to moderate the relation between student ethnicity and teacher self-efficacy.

Student problem behavior

The extent to which teachers feel self-efficacious can be undermined by disruptive and challenging behavior in the classroom (Lambert, McCarthy, O'Donnell, & Wang, 2009; Tschannen-Moran & Woolfolk Hoy, 2001; Tsouloupas et al., 2010; Yoon, 2002). Research has shown that teacher self-efficacy at the student level strongly depends on the perceived problem behaviors of the student (Zee, de Jong, & Koomen, 2016). Students' problem behavior may also amplify the anticipated negative effect of ethnic incongruence on teachers' self-efficacy. Teaching students with problem behavior can be demanding and can generate uncertainty among teachers, as it requires a proper understanding of the behavior and its underlying causes. It may be more difficult to acquire such an understanding when teachers and students do not share the same ethnic background (Pigott & Cowen, 2000; Saft & Pianta, 2001). Moreover, from a social psychological perspective, teachers can be expected to reduce their uncertainty by making ethnic in-group and out-group distinctions with the related stereotypes that provide readymade explanations (Hogg & Terry, 2000). Consistent with these notions, research has shown that ethnic minority students often receive disproportionally harsh treatment and discipline from their (ethnic majority) teachers (Bates & Glick, 2013; Gregory et al., 2014; Gregory & Mosely, 2004; Skiba et al., 2002). Likewise, in an earlier Dutch study there was a weak relation between students' ethnicity and problem behavior but the latter appeared to have stronger effects on majority teachers' relationships with minority versus majority students (Thijs et al., 2012). In the present study, we consider both internalizing (e.g., emotional problems, anxiety) and externalizing problem behavior (e.g., aggression, hyperactivity) for

teachers' self-efficacy with minority versus majority students. Although the latter type of problem behavior has been found to have a stronger impact on self-efficacy at the student level (Zee et al., 2016), both types of problems can place strong demands on teachers and therefore increase the importance of relationship (in)congruence.

Teacher ethnic identification and classroom ethnic composition

Social Identity Theory (Tajfel & Turner, 1979) postulates a basic tendency to make evaluative in- and out-group distinctions but it does not claim that these distinctions are inevitable. In fact there are various personal and contextual factors that determine whether group boundaries are psychology salient and meaningful (Hogg & Terry, 2000; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). On the personal level, in-group identification functions as a 'lens' through which the social world is perceived. Higher identifiers view their group as an important reflection of the self and therefore are motivated to think about their group in a positive way. Thus stronger identification implies a stronger tendency to make a positive distinction in favor of one's own ethnic group (Turner & Reynolds, 2001). We expected that teachers' identification with their majority ethnic in-group entails a less positive perception of ethnic minority versus ethnic majority students, and thereby increases the expected difference in self-efficacy with these two groups of students.

At the contextual level, we examine the role of the ethnic composition of the classroom. The presence of ethnic minority children may influence the degree to which ethnic group boundaries are salient to both students and teachers. When the proportion of minority students in class is low, their ethnic background will stand out more which makes it more likely for majority teachers to think in terms of ethnic group differences (Thijs & Verkuyten, 2012). Conversely, when majority teachers have many minority students in their classrooms, they are more likely to focus on individual differences among these students, and this diminishes their tendency to view their interaction with students in terms of ethnic group differences. For these reasons, we expect teachers to experience more self-efficacy with minority versus majority students in classrooms with relatively many minority group children.

Present study

To summarize, the aim of this study is to investigate the extent to which ethnic majority teachers experience differences in self-efficacy when teaching individual ethnic minority and

majority students. We assume that there is a higher possibility of miscommunications and misunderstandings in ethnically incongruent relationships, and that ethnic group boundaries can become psychologically relevant to teachers. Our overall expectation is that ethnic majority group teachers will feel less efficacious towards ethnic minority than towards ethnic majority children. Given the novelty of this line of research, no hypotheses were developed about specific domains of self-efficacy. Rather, we explored whether our findings differ for the domains of behavioral management, student engagement, instructional strategies, and emotional support. Furthermore, we examined three conditions that are likely to increase the salience of ethnic group boundaries and therefore can be expected to increase the difference in teacher self-efficacy toward ethnic majority versus minority students. We expected this difference to be especially pronounced for students with perceived problem behaviors, for teachers who strongly identify with their majority in-group and in classrooms with relatively few minority students.

2.3 Methods

Participants and procedure

The data for this study was gathered between January and March of 2014 in 18 schools located in urban and rural areas across the Netherlands. To select these schools, we first sampled provinces with at least the national average of 5 percent non-native Dutch inhabitants (including both first and second-generation migrants). This sampling excluded the more remote provinces of the Netherlands (Zeeland, Drenthe, Friesland, and Groningen). Next, schools with an ethnic minority student population of at least 5 percent were selected for participation. In total 489 schools where contacted by email and phone, of which 18 participated in the study, which amounts to a 3.6 percent response rate.

Participants were 40 native Dutch teachers (M_{age} = 41.58 years, SD = 12.98; 30 females) with an average teaching experience of 15.68 years (SD = 11.66).[7] They were asked to fill out a

[7] Originally, there were 44 teachers, but unfortunately two of them provided incomplete information about their students and three of them did not provide information at all.

survey regarding eight individual students within their classroom (grade 4-6). This survey was a paper and pencil form that teachers completed, while all of their students anonymously and voluntarily completed questionnaires in the classroom. In addition to this, teachers filled out a digital questionnaire after completion of the paper and pencil survey. This questionnaire contained questions about teachers' ethnic identification. Parents of the students were provided with letters informing them about the aim and procedures of the study and were asked to provide passive consent (obtained for 96 percent of students). All participating teachers signed a written informed consent form at the start of the study.

Our comparative research question required a substantial number of ethnic minority students; preferably, the proportion of native Dutch and non-native Dutch students in our sample would be comparable in size. However, only 8 percent of schools in the Netherlands have an ethnic minority student population of 50 percent or higher (Hartgers, 2007). Thus, we needed to significantly oversample ethnic minority students. A stratified random sampling procedure was used in which a research assistant was instructed to select the first three Moroccan-Dutch, the first three Turkish-Dutch and first two native-Dutch students on the attendance list. Turks and Moroccans are the largest and most typical non-Western minority groups in the Netherlands. If these 'quota' could not be filled, the assistants were asked to select students of another non-Western ethnicity, or if that was not possible, with other native-Dutch students. Information on the ethnic origin of the students was initially provided by the teachers, but we verified this by comparing it to students' self-reports (see below). As three teachers did not fill out the survey for all of the eight selected students, questionnaire data were available for 300 students. Seven students were excluded from the sample because of 'ethnic misidentification' by their teachers. Their teachers labeled them as Dutch, but the students themselves indicated to have a parent from another Western-European country (e.g. Belgium, Spain, and Germany), Australia or the US. It was not clear, if the ethnic background of these non-native Dutch Western students was noticeable to their teachers, and as such, whether this background would play a role in their interaction. These students of non-Dutch, Western origin where thus omitted. Subsequently, 23 (7.67%) students had missing values on the independent variables (see below), and as the pattern of missing values appeared to be completely at random according to Little's MCAR test ($\chi^2(5) = 4.005$, $p = .568$), these students were not included in the analyses. Our final sample consists of 292 students of whom 112 were of native Dutch

origin, and 180 were of non-native Dutch (non-Western) origin (M_{age} = 10.54 years, SD = 1.01; 50.3% female). The non-native group predominantly consisted of students with a Turkish (36.1%), Moroccan (31.1%), Eastern European (10%) or Surinamese/Antillean (5.6%) background, and the large majority of them had lived in the Netherlands (91.5%) all their lives. Descriptive statistics for these students, their teachers, and their classrooms are given in Table 1. Compared to their native majority peers, the ethnic minority students were somewhat older. There was variation in the proportion of ethnic minority students selected per teacher, and the ethnic classroom composition ranged from 0% to 100% Dutch students.

Measures

Student specific teacher self-efficacy

To measure teachers' self-efficacy in relation to each of the selected students we used a student-specific adaptation (see Zee, et al., 2016) of the Teacher Self-Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001). In this adaptation, the original three domains of Instructional Strategies (IS), Behavior Management (BM) and Student Engagement (SE) are considered, but the items were formulated at the level of the individual student rather than classroom. Additionally, based on the CLASS framework Emotional Support (ES) was added as a fourth domain of self-efficacy (Hamre et al., 2013). In order to assess the items for content validity, the student specific TSES was pilot tested with six elementary school teachers, who reviewed the items for clarity of wording, and relevance of the response scale. The IS subscale consists of six items (e.g., 'How much can you do to get this student to apply alternative strategies?') and the BM subscale consists of five items (e.g., 'How much can you do to get this student to follow classroom rules?'). SE and ES are both measured with seven items (e.g. respectively 'How much can you do to help this student value learning?' and 'How well can you provide a safe and secure environment for this student?'). Answers are measured on seven-point Likert type scales ranging from 0 (*nothing*) to 6 (*a great deal*). The overall factor structure and the structures of the four subscales were validated in a large sample of 107 teachers and 841 students that included the participants of the present study (for more elaborate details, see Zee et al., 2016). Additionally, student specific TSES was shown to be concurrently valid, as it was moderately correlated the original TSES scale ($r = .59$, $p < .001$).

Table 2.1 *Model fit statistics for exploratory factor analysis for Student-specific teacher self-efficacy*

Nr. of factors	*χ2 (df)*	*Δ χ2 (df)*	*CFI*	*RMSEA*	*SMRS within*	*SMRS between*
3 within/ 3 between	899.461 (456)		.934	.058	.035	.097
3 within/ 4 between	856.071 (434)	43.390 (22) ***	.937	.058	.034	.067
4 within/ 3 between	700.063 (434)	156.008 (0) ***	.961	.046	.028	.092
4 within/ 4 between	663.534 (412)	36.529 (22) *	.963	.046	.028	.073

Note. *p < .05, ** p < .01, *** p < .001 (two-sided).

For the smaller subsample used in this study, the proposed factor structure was retested in Mplus 7.4 (Muthén & Muthén, 2012). Exploratory factor analyses were conducted, comparing three and four factor structures at both the within and between level for the TSES measurement. These analyses showed (see Table 2.1), that a model with three factors at both the within and between levels fit the model significantly worse than a model with model with four factors at the between ($\Delta \chi^2 (22) = 43.390$, $p < .001$) and within model ($\Delta \chi^2 (0) = 156.008$, $p < .001$). The final model with four factors at both the within and the between level also significantly differs from the model with four factors at the within and three at the between level, and thus fit the data somewhat better ($\Delta \chi^2 (22) = 36.529$, $p < .05$). And because, theoretically, we preferred the four factor model, we decided to estimate the four-factor as previously used (Zee et al., 2016). We therefore proceeded with a confirmatory factor analysis, modeling four factors at both levels, which showed a reasonable model fit ($\chi^2 (526) = 1174.817$, $p < .001$, RMSEA = .065, CFI = .904, $SRMR_{within} = .063$, $SRMR_{between} = .154$). There were some cross-loadings between the items for the domains of instructional strategies and student engagement. Additional analyses were conducted, in which the cross-loaded items were omitted from the analysis and this showed similar directions for all effects. We present the analyses with cross-loading items included.

Given the hierarchical nature of the data, we report on reliability of scales with omega's instead of Cronbach's alpha's as suggested by Geldhof, Preacher and Zyphur (2014). We constructed four subscales and omega's at between and within levels were satisfactory for each of them (IS: $\omega_{within} = 0.92$, $\omega_{between} = 0.97$; BM: $\omega_{within} = 0.95$, $\omega_{between} = 0.94$; SE: $\omega_{within} = 0.92$, $\omega_{between} = 0.97$; ES: $\omega_{within} = 0.85$, $\omega_{between} = 0.95$). Additionally, we created an overall scale by averaging values of all items as an indicator of a general sense of teacher self-efficacy ($\omega_{within} = 0.91$, $\omega_{between} = 0.99$).

Student problem behavior

Teachers' perception of students' problem behavior was measured with the teacher version of the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997, 2001). More specifically, we used the emotional problems subscale for the assessment of children's internalizing problems. This subscale includes five items (e.g., 'is often unhappy, down, in tears') and omega's illustrate a reliable scale ($\omega_{within} = 0.79$, $\omega_{between} = 0.87$). For the assessment of externalizing problems, we used the five items of the hyperactivity subscale (e.g., 'is restless, hyperactive, can't sit still for a long time') and five items of the conduct problems subscale (e.g., 'often fights with other children, or bullies them'). These items together formed a reliable scale for externalizing problem behavior ($\omega_{within} = 0.89$, $\omega_{between} = 0.70$). All items were measured on a 5-point Likert scale ranging from 0 (completely disagree) to 4 (completely agree).

Teacher ethnic identification

Teachers' identification with their Dutch in-group was measured with 4 items that have been successfully used in previous studies (e.g., Hindriks, Verkuyten, & Coenders, 2014; Verkuyten & Martinovic, 2006). The items were 'My Dutch identity is an important part of who I am', 'I strongly identify with the Netherlands', 'I am proud to be Dutch', and 'I feel strongly connected to Dutch people' (5-point Likert scale; 0=strongly disagree, 4=strongly agree; $\omega_{between} = 0.92$).

Student ethnicity and ethnic classroom composition

Ethnic background of the students was reported by both students and teachers. However, teachers often did not explicitly categorize students whom they perceived to be native Dutch, which means that the teacher data was incomplete (27.2% missing). Therefore, we relied on information provided by the students and this information was coded based on the country of birth of the student's parents and the ethnic self-labeling of the students (both open-ended questions). Students were considered to have an ethnic majority (native Dutch) background (coded 0) if they indicated that both their parents were born in the Netherlands and also described themselves as ethnic Dutch. Students were labeled as being of an ethnic minority (non-native Dutch) origin (coded 1) when: 1) at least one parent was born outside of the Netherlands and the student self-identified with a non-Dutch label (such as Moroccan or Moroccan-Dutch), 2) at least one parent was born outside of the Netherlands but the student self-identified with the label 'Dutch', or 3) at least one parent was born in the Netherlands but the student self-identified with a non-Dutch label (such as Moroccan or Moroccan-Dutch). If

students only answered one of the questions, this answer was used to indicate their ethnic background. Ethnic labels provided by the teachers matched the categorization that followed from this procedure (the seven cases in which this was not the case pertained to children with a Western non-Dutch label, such as Belgian or German, and where excluded for the sample). Thus, students that were labeled as non-native (non-Western) Dutch students were also labeled as such by their teachers.

The *proportion of non-Dutch student*s in the classroom was computed by dividing the number of students with a non-native Dutch background (based on student information as described above) in each of the classrooms by the total number of students in the classroom.

Control variables

We control for students' and teachers' *age* (in years) and *gender* (0 = male, and 1 = female).

Data analytic strategy

We investigated differential teacher self-efficacy by estimating multilevel regression models in Mplus 7.4 (Muthén & Muthén, 2012). Multilevel analysis is required to account for the possible dependency of the student data, given that students were nested within teachers. Because the structure of our data is not independent and because our dependent variable was slightly, though not problematically, skewed (Skewness = -.866, Kurtosis = .291), all models were estimated using the MLR estimator. This estimator provides maximum likelihood parameter estimates with standard errors and a chi-square test statistic that are robust to non-normality and non-independence. In the initial step of our analyses, we estimated an intercept only model to estimate the amount of variance in self-efficacy located at the students and the teacher level. The effect of student ethnicity on teacher self-efficacy was added in a first model, while in a second model we took the control variables into account (age, gender). In a third model we added direct effects for problem behavior, Dutch identification, and ethnic classroom composition. Finally, in the fourth model of our analyses we tested the hypotheses about the conditions for differential self-efficacy by adding interaction effects between student ethnicity and the proposed moderators (problem behavior, Dutch identification, and ethnic classroom composition).

Given our restricted sample size and the fact that we had directional hypotheses, we used one-sided significance tests to test the effects of student ethnicity, students' problem behavior, teachers' ethnic identification, and ethnic classroom composition, and the interactions between ethnicity and these conditions. We used two-sided tests for control variables. For all tests, alpha levels were set at 0.05 or lower. In models, one, two and three, fixed effects were estimated for all variables. In model four, a random effect of student ethnicity was estimated, in order to estimate cross-level interactions between student ethnicity and teachers' Dutch identification and ethnic composition of the classroom.

For sake of model sparsity, these steps were first conducted using the overall construct of student specific self-efficacy. Subsequently, we explored possible differences in the effects for each of the four domains. These latter analyses were conducted by estimating the model presented in the last step of our analysis separately for each of the four domains by using Bonferroni corrections. Due to sample size restrictions, it was not possible to examine the four domains simultaneously in a single multivariate model. We will present standardized effects in Tables and Figures. All continuous variables were centered on their mean to enhance the interpretation of the findings.

2.4 Results

Preliminary analyses

For descriptive purposes, we first inspected the mean scores for ethnic minority and majority students on the main study variables (Table 2.2). There were significant mean differences on internalizing problem behavior; teachers reported significantly less internalizing problem behavior among ethnic minority students. No mean differences were found for externalizing problem behavior. Mean differences in teacher self-efficacy toward minority- and majority students, show that teachers feel less efficacious with ethnic minority students in the domains of instructional strategies and student engagement, but not in the domains of behavioral problems or emotional support. Inspection of correlations in Table 2.3 showed that girls displayed fewer externalizing problems and teachers experienced more efficacy in managing behavior of- and emotionally supporting girls. Age was not correlated to efficacy. At the teacher-level, none of the covariates was found to be interrelated.

Table 2.2 *Descriptive statistics and analysis of variance of difference between ethnic majority and -minority students*

		Native Dutch N=112		*Non-native Dutch* N=180		Δ *M* [a]
Student level	*Range*	*M*	*SD*	*M*	*SD*	
Female	0 - 1	.54	.50	.48	.50	-.06
Age	9 - 13	10.29	.96	10.69	1.02	.40**
Internalizing prob. behavior	0 - 4	1.15	.98	.88	.87	-.27*
Externalizing prob. behavior	0 - 4	.96	.81	.95	.84	-.01
SS TSE – Instructional strategies	0 - 6	4.98	.81	4.72	1.00	-.26*
SS TSE – Behavioral management	0 - 6	5.23	.93	5.22	1.09	-.01
SS TSE – Student engagement	0 - 6	4.94	.91	4.65	1.09	-.29*
SS TSE – Emotional support	0 - 6	5.12	.72	4.97	.81	-.15

		Native Dutch N=40	
Teacher level	*Range*	*M*	*SD*
Age	20 - 63	41.58	12.98
Female (ref. Male)	0 - 1	.75	.44
Dutch identification	0 - 3	2.44	.76
Ethnic composition classroom	0 - 1	.57	.30

Note. [a] Anova with ethnic majority as reference group. *p < .05, ** p < .01, *** p < .001 (two-sided).

Table 2.3 *Bivariate correlations between student- and teacher level variables*

	1.	2	3.	4.	5.	6.	7.	8.
Student level								
1. ER minority background	-							
2. Female	-.051	-						
3. Age	.190**	.061	-					
4. Internalizing prob. behavior	-.139*	.076	-.042	-				
5. Externalizing prob. behavior	-.005	-.253**	-.059	.301***	-			
6. SS TSE – Instructional strategies	-.136*	.087	-.019	-.297***	-.480***	-		
7. SS TSE – Behavioral management	-.001	.191**	.054	-.204***	-.714***	.528***	-	
8. SS TSE – Student engagement	-.138*	.126*	.017	-.273***	-.567***	.911***	.586***	-
9. SS TSE – Emotional support	-.095	.140*	.025	-.227***	-.527***	.861***	.647***	.872***

Teacher level	1.	2.	3.
1. Age	-		
2. Female (ref. Male)	-.298	-	
3. Dutch identification	.017	-.120	-
4. Ethnic composition classroom	-.079	.293	.125

Note. *p < .05, ** p < .01, *** p < .001 (two-sided).

Differential teacher self-efficacy

We conducted a multivariate multilevel regression analysis of student specific teacher self-efficacy. We first estimated an intercept-only model (Model 0, Table 2.4) and the intraclass correlations for teacher self-efficacy was 0.250 ($p < .01$). This means that 25 percent of the

variance in self-efficacy related to differences between teachers and that the variability in self-efficacy was strongly related to differences at the student level. In our next step, we estimated the effect of student ethnicity (see Model 1, Table 2.4) and teachers were found to experience somewhat less self-efficacy with ethnic minority students. This expected effect was significant with one-sided hypothesis testing ($p = .035$). However, it explained a marginal 1.4 percent of the variance in teacher self-efficacy. In the subsequent model we took, the covariates into account (see Model 2, Table 2.4) and we found that teachers experienced more self-efficacy in relation to girls compared to boys. Students' age had no significant effect on teacher self-efficacy. The results moreover show that that teachers' gender or age did not have a significant effect on self-efficacy. Even when adding the covariates to the model, the effect of student ethnicity remains negative and significant. Compared to model 1, model 2 explains 2 percent of the total residual variance in teacher self-efficacy. Additional analyses were conducted to investigate whether there were any interactions between the effects of student ethnicity and the effects of age and gender. These were found not to be significant, indicating that teachers do not feel differently efficacious towards older versus younger minority students and male versus female minority students.

Initial analyses also included a measure of parental socioeconomic status. This status was reported by teachers (no parental indication was available, as parents did not participate in the study). Descriptive statistics showed that, compared to their native Dutch majority peers, ethnic minority students had considerably lower SES backgrounds. Results of these analyses showed that when controlling for parental SES the effect of student ethnicity was no longer found to be significant. This is like due to the fact that, though there is substantial variation in ethnicities among students with middle and high SES backgrounds, in this study, students of low SES backgrounds are mostly of ethnic minority origins. Because of this conflation, which is quite common in studies among ethnic minorities, it is difficult to disentangle the effects of ethnicity and socioeconomic background. Moreover, we judged the measure of parental socioeconomic status available in this study as somewhat problematic, as teachers rather than the parents themselves assessed them. Teachers may link students' academic outcomes to parental

socioeconomic status, thus creating a bias in their perception of the latter. We, therefore, decided no longer to include thus variable as control variable.[8]

Table 2.4 *Standardized effects of ethnicity, conditions, and controls on student-specific teacher self-efficacy*

	Model 0	Model 1	Model 2	Model 3	Model 4
Intercept	4.940	5.098	4.807	4.940	4.986
Student level					
Non-Dutch (cont. Dutch)		-.170*	-.166*	-.185*	-.160*
Female			.154**	.009	.017
Age			-.073	-.058	-.082~
Conditions					
Internalizing problem behavior				-.121**	-.029
Externalizing problem behavior				-.589***	-.602***
Non-Dutch * Int. prob. beh.					-.158*
Non-Dutch * Ext. prob. beh.					.026
Teacher-level					
Female			.226	.262	.266
Age			-.001	.021	.052
Conditions					
Dutch identification				.123	.126
Ethnic composition classroom				.023	-.119
Non-Dutch * Dutch id.					.007
Non-Dutch * Ethnic comp.					.197~
Variance					
Level 1 (stud.)	.532	.518***	.498***	.276***	.231***
Level 2 (teacher)	.177 (ICC .250)	.182**	.188**	.115**	.082*
Total (% explained vs previous model)	.709	.700 (1.4%)	.686 (2%)	.391 (43%)	.313 (19.9%)
AIC	698.593	694.676	692.954	531.266	516.896

Note. One-sided tests for ethnicity, conditions and interactions, others two-sided test. ~ $p < .06$, *$p < .05$, ** $p < .01$, *** $p < .001$.

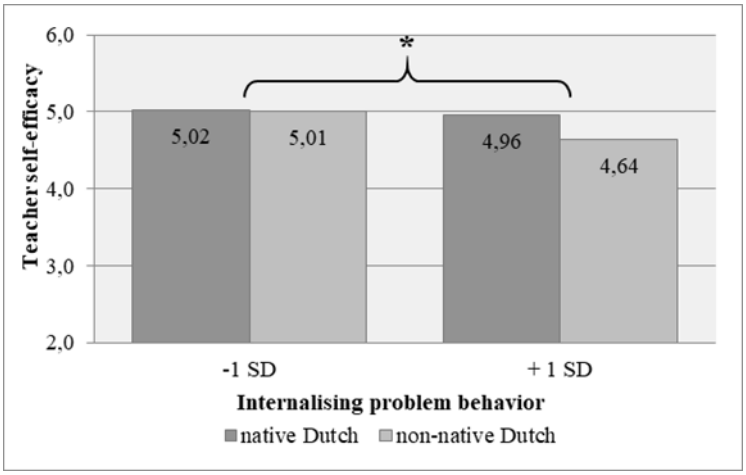
The moderating role of problem behavior, identification, and classroom composition

The third model shows the results for the effects of problem behavior, teacher's Dutch identification and the ethnic composition of the classroom (Model 3, Table 2.4). Problem behavior had a negative effect on teacher self-efficacy and externalizing problem behavior in

[8] We did conduct additional analyses to assess whether the results of the analysis in which parental SES was included differ from the results in which this variable is not included as a control variable. These analyses revealed that all variables and interactions were estimated to have a similar direction and effect size, except for the effect of student ethnicity, which, when SES was included, no longer had a significant effect on student specific teacher self-efficacy.

particular. After adding these variables to the model, the negative effect of student ethnicity remained significant (B = -.185, p < .05). Furthermore, on the teacher level, neither the extent to which teachers identified with their Dutch ethnic background, nor the ethnic composition of the classrooms was related to teacher self-efficacy. Adding these variables to the model explained an additional 43 percent in the residual variance in teacher self-efficacy.

Figure 2.1 *Moderation effect of internalizing problem behavior and student ethnicity on teacher self-efficacy.*[9]



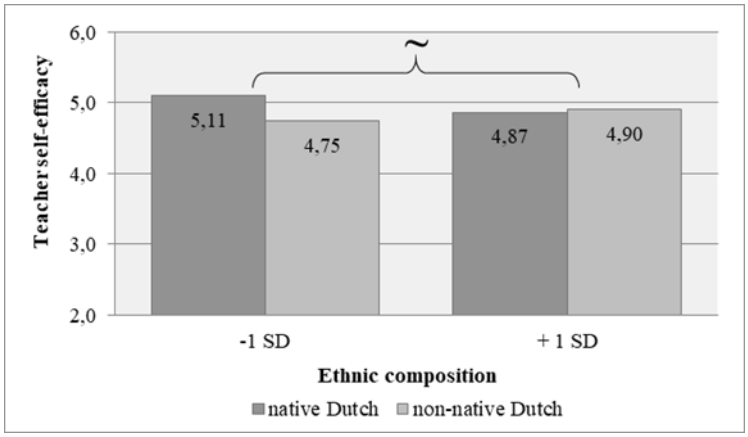
Note. * p < .05

In the next step (Model 4, Table 2.4) we examined whether teachers' self-efficacy with minority versus majority students was dependent on students' problem behavior, teachers' ethnic identification and the ethnic composition of the classroom. To this aim, we added the interactions between student ethnicity and those variables to our model. In line with our hypothesis, there was a significant interaction effect between students' non-Dutch background and internalizing problem behavior (B = -.158, p = 0.024; 95% CI: -.290, -.026). No such interaction effect was found for externalizing problem behavior. The interaction indicates that teachers felt less self-efficacious with minority as compared majority students with high internalizing problem behaviors (see Figure 2.1). However, teachers also felt somewhat more self-efficacious with those students when internalizing problems are minimal. We found no significant interaction effect between teachers' identification and the student's ethnic background. However, there was a small, marginally significant positive interaction between

[9] Interaction effects were calculated with the following formula: 4.986+(-0.160 * Non-Dutch)+(-0.029*Internalizing problems)+(-0.158* Non-Dutch * Internalizing problems).

ethnicity and the proportion of minority students in class (B = .197, p = 0.06; 95% CI: -.003, .398). Thus, in line with our expectations, teachers felt somewhat more self-efficacious with minority versus majority students when teaching classrooms with a higher proportion of minority students and feel and less so when teaching classrooms with a lower proportion (see Figure 2.2). Adding the moderators to the model explained an additional 19.9 percent of the variance in teacher self-efficacy compared to the previous model without interactions.

Figure 2.2 *Moderation effect of ethnic composition and student ethnicity on teacher self-efficacy.* [10]



Note. ~ $p < .06$

Exploring differences between domains of self-efficacy

We explored whether there were differences in the directions and sizes of the effects of the different variables for the four separate domains of student specific teacher self-efficacy. Given that this is a replication of our previous analysis, we used more stringent criteria for significance in our hypothesis testing by dividing the p-value criteria by 4.

As shown in Table 2.5, the expected interaction between student ethnicity and internalizing problem behaviors was found to have the same negative direction for all domains. However, for behavior management and emotional support the interaction effects were not significant. The effect on efficacy for instructional strategies (B = -.242) and student engagement (B = -.176) are similarly negative and larger; the effect is only found to be significant for the domain of instructional strategies (p = 0.0055) but for the domain of student engagement the effect is

[10] Interaction effects were calculated with the following formula: 4.986+(-0.160 * Non-Dutch)+(-0.119*Ethnic composition)+(-0.197* Non-Dutch * Ethnic composition).

only marginally significant (p = .034, with one-sided testing). This indicates that teachers felt somewhat less efficacious in instructing minority students with internalizing problems compared to majority students with internalizing problems. Moreover, although the direction of the interaction effects between student ethnicity and the proportion of minority students in the classroom was similar for all domains, the results also show that this effect was significant only in the domains of instructional strategies (p = .046, with one-sided testing) and student engagement (p = .044, with one-sided testing). This indicates that teachers found themselves somewhat more self-efficacious in instructing and engaging ethnic minority students in classrooms with a higher percentage of minority students, and less so in classrooms low percentages of minority students. The interaction effect between Dutch identification of the teacher and ethnicity was not significant for any of the domains of teacher self-efficacy.

Table 2.5 *Standardized effects of conditions on student-specific teacher self-efficacy*

	SS TSES - IS	SS TSES - BM	SS TSES – SE	SS TSES - ES
Student level				
Non-Dutch (cont. Dutch)	.186~	-.071	-.210~	-.152
Conditions				
Internalizing problem behavior	-.066+	.011	-.051	-.017
Externalizing problem behavior	-.510***	-.858***	-.602***	-.516***
Non-Dutch * Int. prob. beh.	-.242*	-.026	-.176~	-.138+
Non-Dutch * Ext. prob. beh.	.073	-.070	.036	.054
Teacher-level variables				
Conditions				
Dutch identification	.147	.076	.123	.110
Ethnic composition classroom	-.203~	-.021	-.122	-.123
Non-Dutch * Dutch identification	.067	-.009	.061	.027
Non-Dutch * Ethnic comp. classroom	.252~	.081	.231~	.192+
Variance				
Level 1 (student)	.304***	.283***	.262***	.223***
Level 2 (teacher)	.074	.019	.055	.123~
AIC	588.407	529.616	541.483	515.730

Note. Model estimation includes control variables at both student and teacher level. + < .1, ~ p <.05, * p < .0125, ** p < .0025, *** p < .00025.

Overall, the findings for general self-efficacy hold for the domains of instructional strategies and student engagement in particular. Teacher self-efficacy for behavioral management was mainly explained by externalizing problem behavior and unrelated to students' ethnic background.

2.5 Discussion

Although teacher self-efficacy has been studied extensively over the past decades, little attention has been paid to teacher self-efficacy in multiethnic classrooms. The few studies that have addressed this topic have assessed *between-teacher* differences in feeling capable to teach in a manner that is sensitive to the ethnic background of their students (Siwatu, 2007; Tucker et al., 2005). Of course, such a research approach is very valuable, as it can highlight the factors that contribute to teachers' subjective experiences of dealing with diversity in their classrooms (e.g. Fitchett, Starker, & Salyers, 2012; Siwatu, 2011). However, by definition, it focuses on teachers' global and rather explicit judgments on the roles of student race or ethnicity. Teacher-level research can investigate the role of classroom-, teacher-, or school factors, but it cannot examine how teachers' self-efficacy with individual students is uniquely affected by the ethnic background of the latter. Our study used a new measure for student-specific teacher self-efficacy, which allowed us to investigate both *between-* and *within-teacher* variability. Thus, we were able to examine the unique role of ethnic status *vis à vis* other student characteristics.

Our results showed that native Dutch teachers tend to experience somewhat less self-efficacy with ethnic minority students compared to native Dutch majority students. This finding is in line with previous research that has found that teachers hold more negative perceptions of ethnic minority students, both in interpersonal student-teacher relationships (J. N. Hughes et al., 2005; Saft & Pianta, 2001; Thijs et al., 2012) and in academic expectations (Glock et al., 2013; Irizarry, 2015; Pigott & Cowen, 2000; Tenenbaum & Ruck, 2007; Van den Bergh et al., 2010). However, it is important to note that, overall, student minority status explained only a small part of the variance in teacher self-efficacy, and that externalizing behavior (see below) appeared to be much more relevant.

Consistent with our hypotheses, the effects of ethnic minority status appeared to depend on students' teacher-perceived internalizing behaviors, and the ethnic composition of the classroom. Teachers found it more difficult to teach minority students as compared to majority students when they perceived strong internalizing problems, and thus these problems made the minority-majority difference in self-efficacy stronger. Remarkably, teachers also felt somewhat more self-efficacious with ethnic minority students when they perceived weak internalizing problems. It is not directly clear why this interaction effect was absent for externalizing

problems but a possible reason is that dealing with internalizing problems might require more subtle and culturally sensitive pedagogic skills than dealing with externalizing problems (Le Roux, 2002; Wubbels et al., 2006).

With regard to the ethnic context of the classroom, we found that teachers in classrooms with a lower proportion of ethnic minority students felt somewhat less self-efficacious in teaching minority students, while teachers in highly diverse classrooms feel somewhat more self-efficacious. We expected this effect based on social psychological theorizing on the role of group distinctions (Hogg & Terry, 2000; Tajfel & Turner, 1979; J. C. Turner et al., 1987), and more specifically we anticipated that when the proportion of minority students in class is low, the ethnic background of these minority students stand out more (cf., Thijs & Verkuyten, 2012). However, we did not find a moderating effect of teachers' own ethnic in-group identification, and this suggests another and simpler explanation. Possibly, teachers in more diverse classes have more experiences with culturally different students and this can make them feel more self-efficacious in teaching minority group students. This interpretation suggests that the particular intergroup context is less important for teachers' self-efficacy than their personal experiences and intercultural skills. Teachers who have more experiences with minority group students might perceive these students more as individual students rather than in terms of their ethnic background. Moreover, our study shows that strength of teachers' Dutch identification did not affect their differential self-efficacy with minority versus majority students, which seems to suggest that identification does not make differences between ethnic minority and majority backgrounds more salient to teachers.

Consistent with previous research (Tsouloupas et al., 2010; M. Zee, De Jong, et al., 2016), students' externalizing behavior problems (perceived by the teacher) were found to be the strongest predictor of teachers' student-specific self-efficacy. It is important to note, however, that these problems could not explain the effect of minority status in our study. In fact, teachers reported similar levels of externalizing problems for the minority and majority students in the sample. Although many US based studies often show an overestimation of externalizing problems among ethnic minority-, and particularly African-American youth (Bates & Glick, 2013; Skiba et al., 2002), findings in the Netherlands have been inconsistent. Some studies find higher externalizing problem behavior among ethnic minority youths (G. Stevens et al., 2003), while others do not (Crijnen, Bengi-Arslan, & Verhulst, 2000), or have found mixed findings

depending on immigrant-origin (Vollebergh et al., 2005). Thus, our findings with regards to externalizing problem behavior and ethnic minority status are not exceptional in the Dutch context.

Our exploration of domain specific self-efficacy revealed that the overall results are most clearly found for the domains of instructional strategies and student engagement, and to a lesser extent for the domain of emotional support. In contrast, teacher self-efficacy for behavioral management was mainly predicted by students' externalizing problem behavior, which was found not to depend on students' ethnic background. This is in line with previous work showing that behavioral management is relatively distinctive from tasks that focus on supporting the learning process through instruction, motivation and emotional support (Tschannen-Moran & Woolfolk Hoy, 2001; Zee et al., 2016). The differential experiences with students thus seem to occur with regard to efforts to advance learning rather than in managing student behavior in the classroom.

Limitations

There are several limitations to our study that should be taken into account when interpreting the findings. First, our results could be affected by selectivity because participation might have been appealing to schools with self-efficacious teachers, and not so much to schools with already strenuous workloads and perhaps, therefore, less self-efficacious teachers. However, the response rate within schools was reasonable (67 percent) and the within school/teacher difference may compensate for the selectivity of participating schools. In addition, we found a wide range of responses on the self-efficacy measures, including scores towards the lower end of the scale. This indicates that some of the participating teachers experienced themselves to be not very efficacious.

A second limitation of our study is that we were not able to assess the effect of students' ethnic/racial background on student specific teacher self-efficacy, while properly controlling for parental socioeconomic status. Previous research has shown that teachers have more negative perceptions of students from a low SES background (Auwarter & Aruguete, 2008; Dee, 2005; Podell & Soodak, 1993), and experience less self-efficacy in schools with a high percentage of low SES students (Goddard & Goddard, 2001). And, as such, SES may have a negative impact on student specific teacher self-efficacy. However, the measure for SES

available in this study was based on teacher reports of parental education and job status. These reports may, however, be biased as teacher may link students' academic outcomes to parental socioeconomic status. Additional analyses using this measure of parental SES as a control variable show similar results for the effects of problem behavior and the interaction effects, though the effect of student ethnicity is smaller. Nonetheless, future studies should preferably also include a parent-reported measure of socioeconomic status, in order to disentangle the effects of socioeconomic status and ethnic/racial background on teachers' self-efficacy.

Similarly, problem behavior was reported by teachers rather than the students themselves. Teachers with a problematic relation with a particular student might be more likely to perceive the behavior of this student more negatively, thus creating a bias in their perception of the latter. Future studies could include a parent-reported measure of socioeconomic status, and student- or parental assessments of student problem behavior, as studies have shown that these reports tend to diverge (G. Stevens et al., 2003), and may thus also have different effects on teacher self-efficacy.

Next, given sample size restrictions, we were not able to assess differences for specific ethnic minority groups. The two largest minority groups in our sample, students of Turkish and Moroccan background, are small (respectively 65 and 56 students), and analysis of differences would not generate enough variance at both the within- and between-teacher level. However, previous studies have shown that teachers potentially do distinguish between students of Turkish and Moroccan origin in their assessment of student-teacher relationships (Thijs et al., 2012) or behavioral problems (Vollebergh et al., 2005). Future studies should thus not only include student and parent assessments of socioeconomic background, but also investigate differences in self-efficacy with regard to different ethnic minority groups.

Fourth, we interpreted the effects of student ethnic background in terms of ethnic incongruence, but it is important to note that all of our teachers belonged to the native Dutch majority group. Unfortunately, there are relatively few minority teachers in the Netherlands (Thijs et al., 2012) but future research could selectively oversample them to strengthen the interpretation of the current findings. Based on the present findings and previous research on student-teacher relationship incongruence (e.g. Saft & Pianta, 2001), we would anticipate that

ethnic minority teachers feel slightly more efficacious with co-ethnic (or co-racial) rather than other-ethnic (or other-racial) students.

Fifth, due to the cross-sectional design of the study we were not able to establish the direction of influence between the constructs considered. It is possible that some of the relations go in the reverse direction, and that there are reciprocal influences. The recent review by Zee and Koomen (2016) shows that there is little longitudinal research into teacher self-efficacy. However, studies that do use a longitudinal design show that for instance academic achievement can be both a predictor and a outcome of teacher self-efficacy (Caprara et al., 2006). Although our findings are in line with our theoretical expectations and previous studies, future research should include longitudinal data to test the directions of influence. Related to this, the timing within the school year might be of influence on student-self-efficacy as well. It is possible that, in the beginning of the school year, when relationships between students and teachers are newly formed, (assumptions based on) student characteristics may play a larger role in feelings of self-efficacy, while other factors, such as students' performance in class, may play a larger role once the school year progresses. It would be interesting if future studies would be directed at mapping changes in student-teacher relations over the course of the school year.

Practical implications for research and practice

Our study has several possible implications for research and practice. First, the fact that teachers experience very different levels of self-efficacy in relation to individual students clearly suggests that our within-teacher approach has strong added value. Apparently, teacher self-efficacy depends on the interaction with individual students, and future research could use student-specific measures to more precisely predict student outcomes. For example, on average, existing studies have found only modest links between teacher self-efficacy and student achievement (Zee & Koomen, 2016), but those studies focused on between- rather than within-teacher differences. As teachers' classroom behaviors are considered important outcomes of their efficacy beliefs, future research could also examine how student-specific teacher self-efficacy is related to the quality of the student-teacher relationship.

Next, given the research on the importance of both student-teacher interactions (Saft & Pianta, 2001) and of teacher self-efficacy for the development and achievement of students (Caprara, Barbaranelli, Steca, & Malone, 2006; Ross, 1992), school psychologists may want to pay

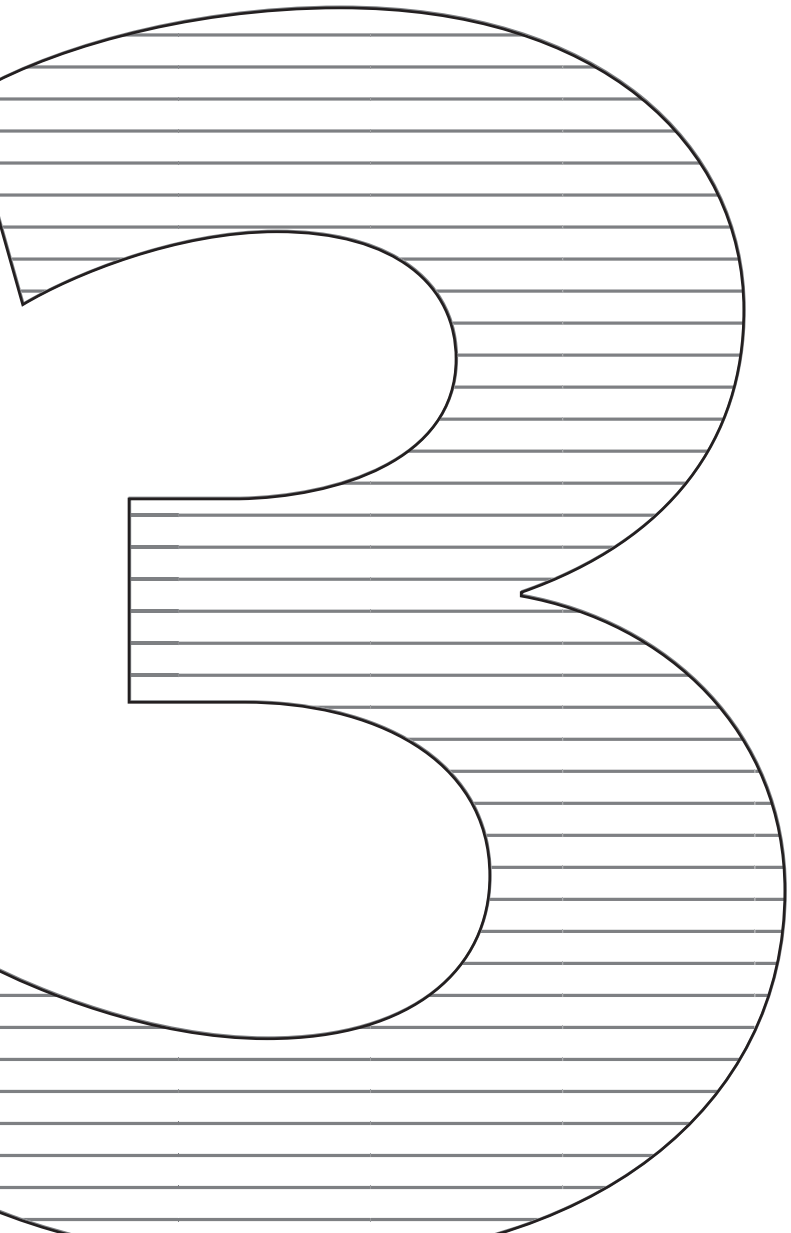
attention to student factors that, either alone or in combination with others, affect teachers' self-efficacy in these interactions (such as behavioral problems, ethnic minority status, SES and gender). In doing so, they would be able to provide more detailed feedback and specifically targeted support for teachers in feeling self-efficacious with particular students. And although our findings show that, by itself, student ethnic minority status may not be the most prominent student characteristic for teacher self-efficacy, they do show that several other characteristics are important, in particular externalizing problem behavior. Moreover, it appears that varying student characteristics and school or classroom contexts may interact and jointly reduce feelings of self-efficacy with regards to certain students. Thus, rather than focusing exclusively on the ethnic background of minority students as such, it seems important for school psychologists to consider the moderating conditions under which this background can potentially factor into teachers' feelings of self-efficacy. More specifically, they might help teachers become aware of these conditions by asking them to complete student-specific questionnaires as used in the present study, and by systematically discussing the results for different minority and majority students with them. Presumably, it is by reflecting on their interactions with individual children rather than discussing their dealings with diversity "in the abstract", that they learn much more about the role of children's ethnic background in their daily teaching practices.

Third, and related to the importance of moderating conditions, teachers were found to differentiate more in their experience of self-efficacy with ethnic minority and majority students in class contexts with a lower proportion of ethnic minority students. This means that ethnic diversifying classrooms could help teachers gain experiencing in teaching a diverse student population. Thus, it is especially teachers in less diverse school settings that could use additional guidance or support in managing cultural diversity in the classroom, in order to enhance their sense of self-efficacy in ethnic incongruent student-teacher interactions.

Conclusions

Teacher self-efficacy is an important factor for various outcomes such as student motivation and academic achievement. Yet not much is known about whether and when teachers experience differences in self-efficacy in teaching students with different ethnic backgrounds. Our study shows that teachers reported extensive *within-teacher* variability in self-efficacy. However, only a small proportion of this variability was related to the ethnic background of

students. Native Dutch majority group teachers reported to experience less self-efficacy with ethnic minority than majority group students. Moreover, when having to deal with internalizing problem behavior of students and, to a lesser extent, when teaching in classes with relatively few ethnic minority students, teachers felt particularly less efficacious in relation to ethnic minority group students. Future research could examine other classroom (e.g. multicultural education; classroom norms about diversity) and teacher (e.g., teacher identity) characteristics that could help us to understand when and why teachers feel less or more self-efficacious in relation to minority group students of various ethnic and racial groups.



Chapter 3

Teacher self-efficacy, student-teacher relationships, and academic engagement among ethnic minority and majority students[11]

Abstract

This study investigates the role of teacher self-efficacy and perceived student-teacher relationship in advancing students' academic engagement. Additionally, it was examined whether the effect of teacher self-efficacy on students' academic engagement depends on students' perceptions of the quality of the student-teacher relationship. We used a student-specific measurement of teacher self-efficacy and longitudinal dyadic data gathered among 38 ethnic Dutch (majority) elementary school teachers, 92 ethnic Dutch students and 137 non-ethnic Dutch (minority) students. Multilevel analyses revealed that student-specific teacher self-efficacy positively influences academic engagement, but this effect was reduced by perceived student-teacher relational conflict.

[11] A slightly different version of this chapter has been submitted as Geerlings, J. & Thijs, J.T. Teacher self-efficacy, student-teacher relationships and academic engagement among ethnic minority and majority students. Geerlings wrote the main part of the manuscript and conducted the analyses. The idea and design of the study were developed by Geerlings. Thijs substantially contributed to the manuscript.

3.1 Introduction

Teacher self-efficacy is crucial for students' academic adjustment. Several studies have shown that students tend to experience more emotional support, have more motivation for their schoolwork, and obtain higher achievement scores if their teachers feel more efficacious in their teaching practices (for an overview, see M. Zee & Koomen, 2016). This self-efficacy has been mainly conceptualized as a global quality of teachers, but recent studies have examined teacher self-efficacy as a student-specific teacher characteristic in primary schools. Just as teachers have qualitatively different affective relationships with different individual students (for a review, see McGrath & Van Bergen, 2015a), they can feel more efficacious with some children than with others. Research has shown that this between-student variation in teacher self-efficacy is considerable (Geerlings, Thijs, & Verkuyten, 2018; M. Zee, De Jong, et al., 2016; M. Zee, Koomen, et al., 2016). Moreover, teachers' sense of efficacy with individual students can be partly explained by the ethnic background of the students (Geerlings et al., 2018). However, very little is known about the impact of teachers' student-specific self-efficacy on the academic adjustment of individual students. It is also unclear whether the effect of student-specific self-efficacy is independent of the student-teacher relationship quality, and whether its impact is similar for ethnic majority students as compared to students with an ethnic minority background – who appear to be more at risk of school dropout and academic underachievement (Curran & Kellogg, 2016; Heath et al., 2008; Kalmijn & Kraaykamp, 2003; Portes & MacLeod, 1999; Quinn & Cooc, 2015). The present study set out to examine these questions by analyzing longitudinal dyadic data gathered among 38 ethnic Dutch (majority) teachers, 90 ethnic Dutch students and 147 non-ethnic Dutch (minority) students in Dutch primary schools (grades 4-6). We focused on academic engagement as an important indicator of students' academic adjustment.

3.2 Theory

The Importance of Teacher Self-Efficacy

Teacher self-efficacy is generally conceptualized as a teacher's belief in their capability to influence student learning (Bandura, 1997; Guskey & Passaro, 1994) and this belief was initially

considered to be a teacher-specific characteristic (Gibson & Dembo, 1984; Schwarzer & Jerusalem, 1995). Over the past two decades, however, research on teacher self-efficacy has been moving away from this trait-like conceptualization by focusing on the *within-teacher* variation in teacher self-efficacy (Klassen et al., 2011). Studies have demonstrated that teachers experience different levels of efficacy in teaching different subjects (i.e. math, reading; Raudenbush et al., 1992; Ross et al., 1996) and in different domains of teaching (i.e. instructional strategies, classroom management, student engagement; Tschannen-Moran & Woolfolk Hoy, 2001; Tsouloupas et al., 2010; Woolfolk Hoy & Burke Spero, 2005). Moreover, recent studies have shown that there is considerable within-teacher variation in teachers' self-efficacy with individual students (M. Zee, Koomen, et al., 2016) and this variation can be linked to individual student characteristics, such as externalizing problem behaviors (M. Zee et al., 2017) and ethnic background (Geerlings et al., 2018). As such, these studies have indicated that teacher self-efficacy is not just an individual characteristic of a teacher but can also be viewed as a characteristic of a particular teacher-student dyad.

As a trait-like teacher characteristic, teacher self-efficacy has been related to student outcomes such as student motivation and engagement (Schunk, 1991; Skinner & Belmont, 1993) and academic achievement (Caprara et al., 2006; Ross, 1992). Not much research has investigated the effects of student-specific (dyadic) teacher self-efficacy on student outcomes. However, a recent study found that it had a positive effect on academic achievement which was stronger than that of trait-like self-efficacy (M. Zee et al., 2018). Self-efficacious teachers have confidence in their own teaching abilities. This allows them to persevere when things get difficult and to provide adequate academic and emotional support to their students (M. Zee & Koomen, 2016). Thus, research has shown that teachers who are more self-efficacious use more effective teaching strategies (A. M. Ryan et al., 2015) do better in organizing their classrooms and controlling student behaviors (Abu-Tineh, Khasawneh, & Khalaileh, 2011; Almog & Shechtman, 2007; Morris-Rothschild & Brassard, 2006) and have more positive emotional interactions with their students (Hamre, Pianta, Downer, & Mashburn, 2008).

According to Self-Determination Theory (SDT; R. M. Ryan & Deci, 2000a), the supportive behaviors of self-efficacious teachers should positively affect the academic adjustment of their students (see also Caprara et al., 2006). SDT claims that human beings have basic psychological needs for autonomy, relatedness, and competence, and that the fulfillment of these needs

depends on adequate support from the environment. Autonomy involves the need to experience that one's behavior originates from oneself and is not imposed by external sources. Relatedness pertains to the involvement in warm relationships with others, i.e. the feeling that there is mutual liking and intimacy. Competence refers to the need to experience mastery and feel capable and efficacious in one's actions (Deci & Ryan, 2016). The needs for autonomy, relatedness, and competence are considered to be general, and although they may vary in salience depending on cultural, situational, and individual factors, they have been found to be important across many different contexts (Church et al., 2013; Deci & Ryan, 2008; R. M. Ryan & Deci, 2000b). SDT further posits that the fulfillment of these basic needs leads to more self-determined motivation and thereby to increased engagement and well-being (R. M. Ryan & Deci, 2000a). Thus, because teacher self-efficacy can be assumed to support students' basic needs fulfilment, we expected that the self-efficacy that teachers experience with individual students would positively predict the degree to which these students are academically engaged.

The Role of Students' Relationship Perceptions

Several studies have shown that the quality of students' relationships with their teachers is important for their academic engagement (Roorda et al., 2017, 2011; Wu et al., 2010). Some of those studies have relied on Self-Determination Theory and explained this effect of relationship quality by referring to the basic need for relatedness. Other research has adopted the so-called extended attachment approach which assumes that teachers can function as 'ad-hoc' or 'secondary' attachment figures. Teachers engage in affectionate bonds with their students, which can provide students with a 'secure base' or 'safe haven' to return to in times of need (Bergin & Bergin, 2009; Verschueren & Koomen, 2012; Zajac & Kobak, 2006). This, in turn, promotes a sense of confidence and security (Weinfield et al., 2008) which can help children to explore challenging and new situations (Bowlby, 1988; Cassidy & Shaver, 2008). Thus, when students experience secure relationships with their teachers, they are more likely to be engaged in classroom activities.

In the present study, we focused on students' perceptions of the student-teacher relationship and we measured this relationship using two dimensions derived from the attachment framework: closeness and conflict. Closeness indicates relational security and refers to the warm and supportive positive aspects of the relationship, whereas conflict indicates relational insecurity and refers to the strenuous, negative aspects of this relationship. Although the

association between closeness and conflict is typically negative, conflictual relationships are not necessarily lacking warmth, which is why it is important to measure both aspects simultaneously (Davis, 2003). We expected both a positive effect of closeness and a negative effect of conflict on students' academic engagement.

Combined Effects between Teacher Self-Efficacy and Student-Teacher Relationships

As we have argued above, both teachers' student-specific self-efficacy and students' perceptions of student-teacher relationship quality are likely to have positive influences on students' academic engagement. While high-quality student-teacher relationships provide emotional support, teacher self-efficacy comprises different domains and providing emotional support is only one of them. Self-efficacious teachers may, therefore, support their students' need for relatedness, but may also support them in feeling competent and autonomous. Thus, it can be assumed that student-specific teacher self-efficacy has an additional effect beyond the students' relationship perceptions. Empirical studies on the association between the trait-like measure of teacher self-efficacy and relationship perceptions have found the two factors to be uncorrelated or only weakly correlated (for review see M. Zee & Koomen, 2016). A recent longitudinal study, using a student-specific measure of teacher self-efficacy and teacher perceptions of the relational quality found that relational conflict limits teachers' sense of self-efficacy over time, but only to a moderate degree (M. Zee et al., 2017). As such, it can be assumed that both factors, though related, are relatively distinct from each other, which allows for the possibility of interactive effects.

It is unclear, however, whether and how both factors interact in affecting student outcomes. To our knowledge, no research has investigated the combined effects of teacher self-efficacy and student-teacher relationship qualities on student outcomes. From an attachment perspective, we would assume that the trust and security that is provided by a high-quality relationship is a vital foundation for positive interactions between students and teachers (Bergin & Bergin, 2009; Davis, 2003). Students lacking that kind of security and trust might be less likely to benefit from their teachers' supportive abilities. And as such, both relational conflict and a lack of closeness could undermine the positive effects of teacher self-efficacy on students' engagement.

The Role of Ethnic Background

In this study, we also investigated whether the effects of student-specific self-efficacy and student-teacher relationship quality differ for students with ethnic minority versus ethnic majority backgrounds. Previous research has shown that ethnic background tends to play an important role in school processes. Ethnic minority students are often at risk for academic underachievement and mental health problems (e.g. Heath et al., 2008; Quinn & Cooc, 2015; G. Stevens & Vollebergh, 2008). Moreover, teachers have been found to experience less favorable relationships with (some groups of) ethnic minority than majority students (e.g. J. N. Hughes et al., 2005; McGrath & Van Bergen, 2015a; Thijs et al., 2012), and may also feel less self-efficacious with them (Geerlings et al., 2018). Less is known, however, about the influence of teacher-student interactions on outcomes for minority and majority students, and the available findings are mixed. Some studies have found that teacher support and student-teacher relationship quality have a larger influence on academic outcomes of students with a minority background (Den Brok et al., 2010; J. N. Hughes et al., 2015), while other studies have found no such effects (e.g. J. N. Hughes et al., 2008).

These different findings suggest different explanations. On the one hand, the absence of ethnic differences in the influence of supportive teacher-student interactions may indicate that the processes behind these interactions are similar. Indeed, both Self-Determination Theory and attachment theory argue that the importance of basic need satisfaction and relational security is universal, and therefore not different for students of different ethnic backgrounds (e.g. Church et al., 2013; Mesman, Van IJzendoorn, & Sagi-schwartz, 2016). On the other hand, ethnic minority students may have more need for (academic) support from their teachers because their parents might have less resources for helping their children, for example due to language difficulties (Den Brok et al., 2010). As such, the effects of teacher self-efficacy and student-teacher relationship quality might be stronger for these children.

Overview of the Study

The aim of this study was to investigate how teachers' student-specific self-efficacy combined with students' perceptions of the student-teacher relationship affected students' academic engagement over time. To this end we used a short-time longitudinal dataset (two waves) collected among students (Grades 4-6) and their teachers in different primary schools in the Netherlands. In the Dutch school system, students tend to have one or two primary teachers

for the whole school year, which means that these individual teachers are important figures in their daily lives. The longitudinal nature of our dataset allowed us to predict students' engagement at the end of the second semester from measures at the start of that semester, while controlling for their earlier engagement

Four hypotheses were tested. First, we expected that students would become more academically engaged over time if their teachers felt more efficacious with them (H1). Similarly, we hypothesized that students' perceptions of a close and non-conflictual relationship with their teachers would predict more engagement over time (H2). Next, we examined whether poor student-teacher relationship quality (lack of closeness, conflict) reduces the positive impact of teacher self-efficacy on students' academic engagement over time (H3) and tested whether the effects of self-efficacy and student-teacher relationship quality differed for ethnic minority versus ethnic majority students (H4).

In testing our hypotheses, we controlled for students' age, gender, problem behaviors, and parental socio-economic status. These variables have been found to be important for academic outcomes (J. N. Hughes et al., 2008; G. Stevens, Pels, Vollebergh, & Crijnen, 2004; Zwirs et al., 2007). Additionally, we included teachers' general self-efficacy, i.e. the degree to which they feel efficacious in teaching the classroom as a whole (M. Zee, Koomen, et al., 2016). Doing so allowed us to demonstrate the added value of measuring and analyzing teacher self-efficacy at the dyadic level.

3.3 Method

Participants and Procedure

The study was conducted in the final three grades (4th – 6th grade) of different elementary schools across the Netherlands. Our comparative research question required a substantial number of ethnic minority students. However, very few schools in the Netherlands have an ethnic minority student population of 50 percent or higher (8 percent of all schools according to Hartgers, 2007). Thus, we selected schools with a student population consisting of at least 10 percent minority students. In total, 489 elementary schools where contacted by email and

phone, after which 40 teachers[12] in 18 schools decided to participate in the study, which amounts to a 3.6 percent response rate. This low response rate, unfortunately, is not uncommon in the Netherlands (M. Zee, Koomen, et al., 2016). Non-participation was often explained in terms of already strenuous workloads or engagement in other research projects. All participating teachers self-identified as Dutch.

Surveys were administered to the teachers and their students, after obtaining passive consent from 96 percent of students' parents. All participating teachers signed a written informed consent form at the start of the study. Data was gathered in two waves; the first wave was administered between January and March of 2014, and the second one in June and July of that same year. Thus, our data encompasses the second semester of the elementary school year. Students filled in a pen and paper questionnaire in their classroom, in the presence of their teacher and a research assistant. The research assistant informed students on the purpose of the study and its confidentiality. Students were shown how to fill in the survey using an unrelated sample question, and the assistant was available to answer clarification questions.

Teachers filled out a survey either on paper during class or online. Next to personal background characteristics, teachers were asked to answer student specific questions (on problem behavior and teacher self-efficacy) with regard to eight of their students. These students were selected by the research assistant who was instructed to select the first six students with an ethnically non-Dutch background and the first two ethnic Dutch students of the attendance list. If fewer than six non-ethnic Dutch students were present, the assistant was instructed to select the ethnic Dutch students next on the attendance list to reach a total of eight students. Information on the ethnic origin of the students was initially provided by the teachers but later verified with students' self-reports (see *Measures*). Two teachers did not fill in the survey for the selected students and three teachers did so for less than eight students. Moreover, 18 students participated in one of the waves only. Consequently, dyadic data was available for 38 teachers (M_{age} = 41.32 years, SD = 12.53; 28 females) in relation to 289 students, in 36 classrooms; two of the 36 classrooms were taught by two teachers (as is common in Dutch elementary schools),

[12] Originally, there were 44 teachers, but unfortunately two of them provided incomplete information about their students and three of them did not provide information at all.

both of whom participated in the study.[13] After listwise deletion of cases with missing values (between 0.3 and 4.8% on the study variables; Little's MCAR test; $p = 0.24$) 229 students were included in analyses. This final sample (M_{age} = 10.56 years, SD = 1.04; 51% female) consisted of 92 students with an ethnic Dutch majority background, and 137 students of non-ethnic Dutch (non-Western) descent. The latter group predominantly consisted of students with a Turkish (36.5%), Moroccan (32.1%), Eastern European/Russian (6.6%) or Surinamese/ Antillean (5.8%) background.

Measures

Academic engagement. Students' academic engagement was assessed at Time 1 and Time 2 using items of the 'Behavioral and emotional engagement and disaffection scales' designed by Skinner, Kindermann, and Furrer (2008). We used four items of the behavioral engagement subscale (e.g. 'I pay attention in class', 'I try hard to do well in school') and two items of the behavioral disaffection subscale ('When I'm in class, I just act like I'm working' and 'When I'm in class, I think about other things'), measured on 5-point Likert-type scales ranging from 0 (no absolutely not!) to 4 (Yes, absolutely!). The disaffection items were reverse coded to form a scale together with the positively worded engagement items. Confirmatory factor analysis revealed that all items loaded on a single factor at both time points (Time 1: $\chi2$ (17) = 21.022, p = .225, RMSEA = .032, CFI = .988, $SRMR_{within}$ = .045; Time 2: $\chi2$ (16) = 17.338, p = .364, RMSEA = .019, CFI = .997, $SRMR_{within}$ = .034), with factor loadings ranging between .45 and .80. Given the hierarchical nature of the data, we calculated scale reliabilities with omega's instead of Cronbach's alpha's as suggested by Geldhof, Preacher and Zyphur (2014). Omega's at within and between levels were satisfactory for the scale at each of the two time points (Time 1; ω_{within} = .79, $\omega_{between}$ = .93; Time 2; ω_{within} = .81, $\omega_{between}$ = .94). We computed an average score of the six items at each time point.

Teacher self-efficacy. To measure teachers' *self-efficacy in relation to each of the selected students* we used the Student-Specific Teacher Self-Efficacy Scale (SS-TSES) (see M. Zee, Koomen, et al., 2016). This instrument measures how self-efficacious teachers feel towards individual students in four

[13] In terms of the dyadic data this entails that the classroom was split in half (based on the attendance list) and students were asked to fill in the questionnaire questions about their teacher with the selected teacher in mind. As a reminder, students were asked to write down the name of their teacher at the top of the page of the aforementioned questions. Likewise, teachers were matched with students from the half of the class that was selected for them for the student-specific questions.

domains of their teaching practice, namely instructional strategies, behavior management, student engagement and emotional support. Previous studies have supported the structural validity of this measure through extensive factor analyses (Geerlings et al., 2018; M. Zee, Koomen, et al., 2016). The subsets for the 'student engagement' domain (e.g. 'How much can you do to help this student value learning?') and the 'emotional support' domain (e.g. 'How well can you provide a safe and secure environment for this student?') each consisted of 7 items. There were 6 items for the domain of instructional strategies (e.g. How much can you do to gauge the comprehension of this student?') and the behavioral domain was assessed with 5 items (e.g. "How much can you do to prevent this student from negatively influencing atmosphere in classroom"). All items were measured on 7-point Likert-type scales ranging from 0 (*nothing*) to 6 (*a great deal*). We conducted a confirmatory factor analysis for this scale, which corroborated that the items formed one factor ($\chi 2$ (535) = 1407.916, $p < .001$, RMSEA = .084, CFI = .837, $SRMR_{within}$ = .119), with item loadings ranging between .43 and .89. Omega's at between and within levels proved the items to combine to a reliable scale ($\omega_{within} = .89$, $\omega_{between} = .99$). We created an overall score by averaging values of the 25 items.

General teacher self-efficacy was assessed using the short form of the Teacher Self Efficacy Scale, developed by Tschannen-Moran and Woolfolk Hoy (2001). This short form consists of 12 items in three domains (four per domain), namely student engagement, instructional strategies, and classroom management. Questions included 'To what extent can you make student believe they can do well in school?', 'How much can you do to adjust the lessons to the level of the students?', and 'How much can you do to limit disruptive student behavior in classroom?'. These items were measured on a 7-point Likert type scale ranging from 0 ('not at all') to 6 ('completely'). Factor analysis confirmed the expected factor structure ($\chi 2$ (52) = 96.696, p = .0002, RMSEA = .143, CFI = .771, $SRMR_{within}$ = .108) with items loading on a single factor (loadings between .41 and .77) and with satisfactory reliability ($\omega_{between} = .86$). An averaged teacher-level score of the four items was computed.

Student-teacher relationship. We used the closeness and conflict subscales from the Student Perception of Relationship with Teacher Scale (SPRTS: Koomen & Jellesma, 2015). The closeness subscale (e.g. 'I feel at ease with my teacher', 'If I have a problem, I can talk to my teacher about it') and the conflict subscale (e.g. 'I can be very angry with my teacher', ' I feel my teacher doesn't trust me') consist of 6 items and were measured on 5-point Likert-type

scales, ranging from 0 (no absolutely not!) to 4 (Yes, absolutely!). Factor analysis yielded a two-factor structure ($\chi 2$ (106) = 109.442, p = .390, RMSEA = .012, CFI = .996, $SRMR_{within}$ = .074), with items loading on their intended factors (loadings between .42 and .74). Omega's at between and within levels showed satisfactory reliability of the scales (Closeness; ω_{within} = .77, $\omega_{between}$ = .99; Conflict; ω_{within} = .82, $\omega_{between}$ = .94). Averaged scores for each subscale were computed.

Ethnic minority vs. majority background. The ethnic background of the students was based on students' report of the country of birth of their parents and the ethnic self-labeling (both open-ended questions). Students were considered to have an ethnic majority (ethnic Dutch) background (coded 0) if they indicated that both their parents were born in the Netherlands and also described themselves as ethnic Dutch. Students were labeled as being of an ethnic minority origin (coded 1) when at least one parent was born outside of the Netherlands and/or the student self-identified with a non-Dutch label (such as Moroccan or Moroccan-Dutch). Students with a non-Dutch Western origin, such as Belgian or German, were excluded from the sample (n = 7). The ethnic categorization resulting from this procedure was compared to information about ethnic background that was provided by teachers to assess whether teachers were aware of their students' ethnic background. Both categorizations matched in all cases.

Control variables

Teachers' perception of *students' problem behavior* was measured with the teacher version of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997, 2001). More specifically, we used the emotional problems subscale for the assessment of children's internalizing problems. This subscale includes five items (e.g., 'is often unhappy, down, in tears') and formed a reliable scale (ω_{within} =0.80, $\omega_{between}$ = .78). For the assessment of externalizing problems, we used the five items of the hyperactivity subscale (e.g., 'is restless, hyperactive, can't sit still for a long time') and four items of the conduct problems subscale (e.g., 'often fights with other children, or bullies them'). One item of the conduct problem subscale ('steals a home, school or other places) was dropped, as it did not fit the factor (loading .261). The remaining items formed a reliable scale for externalizing problem behavior (ω_{within} = .89, $\omega_{between}$ = .82). All items were measured on a 5-point Likert scale ranging from 0 (completely disagree) to 4 (completely agree). We also controlled for students' *age* (in years) and *gender* (0 = male, and 1 = female).

The *ethnic composition* of the classroom was measured by diving the number of students with a non-ethnic Dutch (non-Western) background in each of the 36 classrooms by the total number of students reporting on their ethnicities in each classroom. This generated a classroom-level variable.[14] For 50 students, there was only information on their ethnic self-identification, as these students participated in wave 2 only, and the survey in wave 2 did not include questions on the country of birth of parents. Based on the students who did answer both questions, we found that 88.4 percent of self-labels matched the information on parents' country of birth. And students' self-labels matched teachers' information about their students' ethnicity in all but two cases. We, therefore, decided to maintain the ethnic self-labels as source for students' ethnic background for these 50 students, and used this information in our calculation of the ethnic composition of the classroom.

Data Analysis

We investigated the over-time effects of teacher supportive practices on students' academic engagement by estimating longitudinal multilevel models in Mplus 7.4 (Muthén & Muthén, 2012). We started our analyses by calculating the intraclass correlation and 4.5 percent of the variance in students' academic engagement was found at the teacher level. Though this variance was not substantial, the nested structure of our data nonetheless required estimation using multilevel regression models. When inspecting the variables for non-normality and extreme values, the distribution of relationship conflict was positively skewed (1.410). To account for the non-normality, we used the MLR estimator in Mplus which provides maximum likelihood parameter estimates with standard errors and a chi-square test statistic that are robust to non-normality and non-independence. All continuous variables were standardized at the individual level in the multilevel analyses.

Prior to our main analyses we used confirmatory factor analysis to examine whether the dependent and explanatory variables were invariant across the ethnic minority and majority groups. The main analyses involved four consecutive models. In Model 1, to assess our first

[14] Two of the classrooms participating in the study ($N = 7$ & $N = 7$), were dual-grade classrooms with a combination of grade 3 and 4. In these cases only half of the classroom participated in the study (only grades 4 through 6 were eligible for participation), hence we only had information about the ethnicity of one part of the classroom to calculate the classroom composition. Based on the classrooms' attendance list, and information on ethnicity provided by the teacher, the ethnic composition of the non-participating halves of the classroom was fairly similar to those that participated.

and second hypothesis, we tested the direct effects of student-specific teacher self-efficacy and both aspects of student-teacher relationships, i.e. closeness and conflict on student engagement at Time 2 simultaneously. The second model included two-way interactions between teacher self-efficacy, and closeness and conflict to investigate student-teacher relationship as a possible moderator (H3). To explore ethnic differences in the effects of teacher self-efficacy and student-teacher relationships (H4), we assessed two-way interactions with the dummy variable for students' ethnicity and the explanatory variables in Model 3. In the fourth model, we explored three-way interaction effects between teacher self-efficacy, student-teacher relationship quality, and student ethnicity on academic engagement. In all models, the control variables age, gender, problem behavior and ethnic composition were included.

3.4 Results

Preliminary analyses

Measurement equivalence

Confirmatory factor analyses largely supported the equivalence of the variables used in our study. To test for invariance, we compared models with increasing constraints of equality using Chi-square difference tests (N. Schmitt & Kuljanin, 2008). Thus, we compared a model without constraints with a model in which loadings were set to be similar for both ethnic minority and majority students. Next, the latter model was compared to a model in which both factor loadings and item intercepts were constraint to be equal across both groups.

For the student reported variables, the analyses (Table 3.1) showed that the dependent variable academic engagement was metrically invariant at Time 1 and both metrically and scalarly invariant at Time 2. With regard to the two dimensions of the student-teacher relationship, we found that both closeness and conflict were scalarly invariant between ethnic groups. With regard to the explanatory variables, we found that the teacher-reported explanatory variable for student-specific self-efficacy showed measurement inconsistencies between ethnic groups for metric invariance. Most likely, this was due to a combination between the large number of items used to measure this concept (25 items) and the relatively small sample size. Meade and

Bauer (2007) have shown that sample size and number of items or factors interact to affect invariance. With a large number of items, combined with lower sample sizes ($N <= 400$), it is more difficult to obtain measurement invariance. The inconsistencies are, moreover, in line with a previous study which tested invariance between teachers in a larger sample of the same data collection (M. Zee, Koomen, et al., 2016), which similarly found variations in the self-efficacy reports across teachers, indicating that different teachers may have slightly different interpretations of what constitutes their efficacy with particular students.

Table 3.1 *Measurement equivalence of dependent and exploratory variables between minority and majority samples*

			χ^2 difference test		
	χ^2	df	χ^2	df	*p* value
Behavioral engagement T1					
Configural	31.719	14			
Metric	35.960	22	4.241	6	.644
Scalar	56.507	26	20.547	6	.002
Behavioral engagement T2					
Configural	20.414	14			
Metric	24.360	20	3.946	6	.684
Scalar	34.562	26	10.202	6	.116
SS teacher self-efficacy					
Configural	1.476.781	520			
Metric	1.544.927	545	68.146	25	.000
Scalar	1.584.701	570	39.774	25	.031
STR – Closeness					
Configural	29.562	18			
Metric	30.066	24	504	6	.998
Scalar	35.160	30	5.094	6	.532
STR – Conflict					
Configural	23.518	18			
Metric	34.087	24	10.569	6	.103
Scalar	37.652	30	3.565	6	.735

Still, the factor loadings were largely similar and strongly positive and significant (between .45 and .93; Table S3.1 in Appendices) for both ethnic groups, with the exception of the domain of behavioral management in which the factor loadings where significantly lower on all items for minority students. This may indicate that, unlike in other domains, capabilities in behavior management of minority students are conceived to be different than in management of majority

students.[15] Moreover, we did find that some of the domains of teacher self-efficacy were (close to) scalarly invariant (Instructional strategies: $\Delta \chi^2$ (6) = 8.405, p = .210; Emotional support: $\Delta \chi^2$ (7) = 7.183, p = .410; Behavior management: $\Delta \chi^2$ (5) = 14.483, p = .016), indicating that the mean levels of the underlying items (intercepts) were equal in both groups. Still, given the partial invariance, we should be careful in interpreting the differences in teacher self-efficacy between minority and majority groups.

Means and distributions

Mean scores and distributions are given in Table 3.2. One sample t-tests showed that mean scores deviated from the neutral midpoint for all scales (p < .05). Thus, students generally felt engaged in the classroom and close to their teacher. They also experienced little conflict in their relations with their teacher and their teachers tended to feel relatively efficacious in teaching their students. ANOVA's showed that ethnic minority students reported higher academic engagement at Time 1 compared to ethnic majority students (p = .012). Ethnic majority and minority students reported similar student-teacher relationships in terms of closeness and conflict, but teachers reported less self-efficacy in teaching minority students (p = .045). Additionally, teachers reported a similar occurrence of externalizing problem behavior among both samples but did report more internalizing problem behavior among their ethnic majority students (p = .023).

Table 3.2 *Descriptive statistics*

		Total sample *N*=229		Ethnic majority *N*=92		Ethnic minority *N*=137		
	Range	*M*	*SD*	*M*	*SD*	*M*	*SD*	Δ*M*
Behavioral Engagement T1	0-4	3.25	.54	3.12	.56	3.35	.52	.23*
Behavioral Engagement T2	0-4	3.10	.61	3.03	.55	3.16	.64	.13
SS Teacher self-efficacy	0-6	4.99	.82	5.12	.74	4.90	.86	-.22*
STR – Closeness	0-4	2.64	.86	2.73	.84	2.57	.87	-.16
STR – Conflict	0-4	.69	.76	.65	.69	.71	.81	.06
Female	0-1	.52	.50	.54	.50	.51	.50	-.03
Age	9-13	10.55	1.05	10.30	1.00	10.71	1.05	.41**
Parent socioeconomic status	0-3	2.07	.81	2.51	.65	1.77	.78	-.74***
Internalizing prob. behavior	0-4	.97	.94	1.14	1.02	.86	.87	-.29*
Externalizing prob. behavior	0-4	.91	.83	.91	.81	.91	.84	.00

Note. Anova with ethnic majority as reference group. * p < .05, ** p < .01, *** p < .001 (two-sided).

[15] As an additional check, all analyses were also conducted leaving the domain of behavior management out of the measurement of teacher self-efficacy. This yielded somewhat larger effects, but these effects were similar effects in terms of direction and significance.

Bivariate correlations (Table 3.3) indicate that academic engagement showed strong stability over time (r = .73). Closeness and conflict within the student-teacher relationship were negatively correlated (r = -.45). Conflict was also related to more negative experiences of teacher self-efficacy (r = -.34), while a close relationship with the teacher was not related to self-efficacy. There were also correlations between the explanatory and control variables. Girls reported less conflict with the teacher (r = -.23), and parental socioeconomic status was related to higher levels of teacher self-efficacy (r = .30) and less conflict with the teacher (r = -.19). Both internalizing (r = -.28) and externalizing problem behavior (r = -.61) were associated with less teacher self-efficacy, while only externalizing behavior was related to less closeness (r = -.17) and more conflict with the teacher (r = .48).

Table 3.3 *Bivariate correlations between student-level variables.*

	Correlations								
Dependent variables	*1.*	*2.*	*3.*	*4.*	*5.*	*6.*	*7.*	*8.*	*9.*
1. Behavioral Engagement T1	-								
2. Behavioral Engagement T2	.73***	-							
Explanatory variables									
3. SS teacher self-efficacy	.23**	.28***	-						
4. STR – Closeness	.31***	.29***	.08	-					
5. STR – Conflict	-.43***	-.47***	-.34***	-.45***	-				
Control variables									
6. Female	.10	.20**	.05	.09	-.23***	-			
7. Age	.01	-.04	.02	.08	.01	.08	-		
8. Parent socioeconomic status	-.06	.05	.30***	.13	-.19*	-.03	-.05	-	
9. Internalizing prob. behavior	-.10	-.01	-.28***	.03	.13	.11	-.01	-.11	-
10. Externalizing prob. behavior	-.33***	-.30***	-.61***	-.17**	.48***	-.20**	-.07	-.15*	.30***

Note. Bivariate correlations. *p < .05, ** p < .01, *** p < .001 (two-sided).

Direct effects

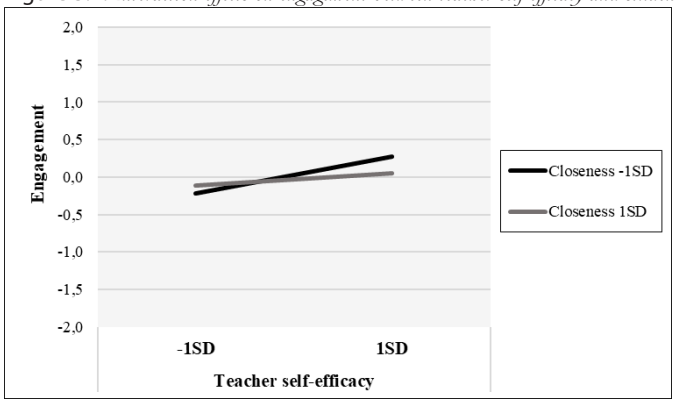
In our first model we tested the first two hypotheses by assessing the direct effects of student-teacher relationship quality and self-efficacy on academic engagement at Time 2, controlling for engagement at Time 1 and the control variables. Consistent with hypothesis 1, our measure of student-specific teacher self-efficacy had a positive effect on engagement (B = 0.138, p = .016, 95% *CI* [0.009, 0.266]), despite a large autoregressive effect of engagement (B = .694). Thus, when teachers felt more efficacious, students became more academically engaged with their schoolwork over time. As for hypothesis 2, closeness with the teacher did not affect engagement over time, but conflict with the teacher was negatively related to engagement (B =

-0.140, p = .022, 95% *CI* [-0.276, -0.004]). When students experienced more conflict with their teacher, they reported less engagement with their schoolwork over time. Including the direct effects of self-efficacy and relational quality to the model explained an additional 5.5 percent of the variance in academic engagement compared to a model with only control variables and the autoregressive effect included.

Student background variables were of little significance for academic engagement at Time 2 when we controlled for its autoregressive effect. Internalizing problem behaviors had a small positive effect on academic engagement, suggesting that students with internalizing problems were somewhat more engaged with their schoolwork over time. The ethnic composition of the classroom was found to negatively affect students' engagement, indicating that in more diverse classrooms, students tend to experience somewhat less engagement with their schoolwork over time. Conversely, the effect of students' ethnic background was found to have a marginally positive effect on engagement indicating that over time students with a minority background reported somewhat higher levels of academic engagement compared to their ethnic majority classmates.

In order to assess if teacher self-efficacy and student-teacher relationships have uniquely dyadic effects, we controlled for similar processes at the classroom level, namely general (not student-specific) teacher self-efficacy. General teacher self-efficacy was not found to influence academic engagement (B = 0.023, 95% *CI* [-0.078, 0.124]). This suggests that teachers' general sense of efficacy in teaching did not affect a change in individual students' academic engagement over time.

Figure 3.1. *Interaction effects on engagement between teacher self-efficacy and student-teacher closeness*



Moderation effects

We investigated if the positive effect of teacher self-efficacy on student engagement depends on the perceived student-teacher relationships (H3). Specifically, we added two-way interactions between both aspects of student-teacher relationships and self-efficacy in Model 2 (Table 3.4). The interaction effect between closeness and self-efficacy was found to be negative *(B* = -0.079, 95% *CI* [-0.149, -0.008]). As illustrated in Figure 3.1, teacher self-efficacy had a positive effect on engagement but, unexpectedly, this effect was stronger when relationships were less close *(B* = 0.245, 95% *CI* [0.099, 0.390]). Relational conflict also had a negative interaction effect with teacher self-efficacy (*B* = -0.096, 95% *CI* [-0.153, -0.038]).

Figure 3.2. *Interaction effects on engagement between teacher self-efficacy and student-teacher conflict*

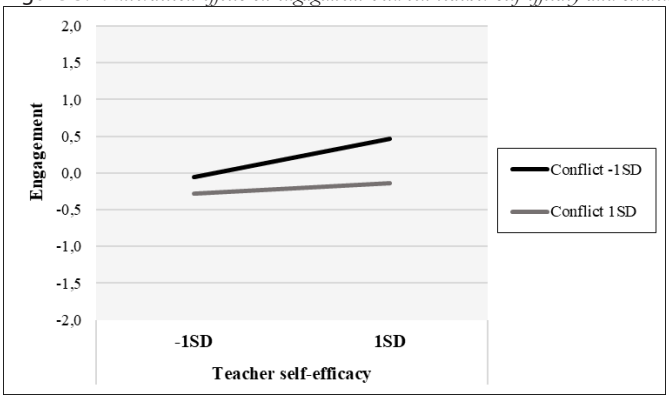


Figure 3.2 shows that when students experienced conflict with their teacher, teacher self-efficacy had little effect on engagement (*B* = 0.070, 95% *CI* [-0.048, 0.188]). However, when conflict was less prominent, teacher self-efficacy had a strong positive effect on engagement (*B* = 0.262, 95% *CI* [0.109, 0.414]). Including these interactions to the model explained an additional 1.1 percent of the variance in academic engagement.

Ethnic differences in the effects of interpersonal interactions

We examined whether the effect of interpersonal interactions on engagement differed for ethnic minority and majority students (H4). To that end, we included interaction effects between all three explanatory variables and student ethnicity in Model 3 (Table 3.4). This analysis demonstrated that the effects of close and conflictual student-teacher relationships did not differ for ethnic majority and minority students. However, there was a marginal interaction effect between student ethnicity and self-efficacy (*B* = 0.163, 95% *CI* [-0.001, 0.326]),

suggesting that the positive effect of teacher self-efficacy was somewhat stronger for ethnic minority students.

In our final model (Model 4), we included two three-way interactions between teacher self-efficacy, student ethnicity and both relationship-measures, respectively. This allowed us to assess if the moderating role of student-teacher relationships was similar for minority and majority students. The three-way interactions with the conflict measure did not have a significant effect on engagement, but the interaction with closeness did have a significant effect (*B* = -0.186, 95% *CI* [-0.301, -0.071]). Adding this three-way interaction to the model explains and additional 2.4 percent of the variance in academic engagement compared to Model 3 and 8.5 percent compared to the first model.

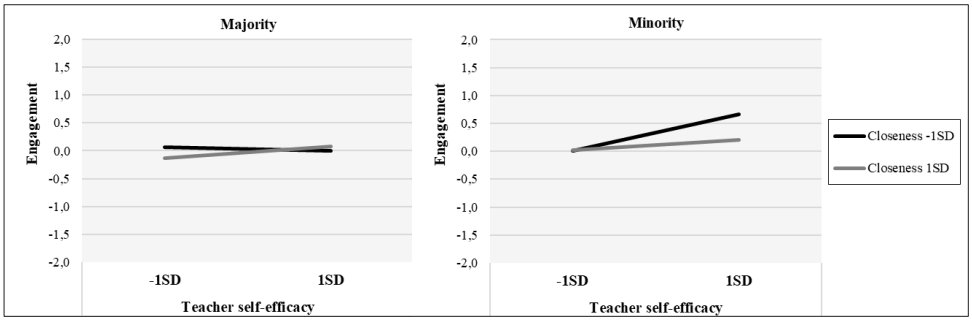
Table 3.4 *Interactions effects on academic engagement*

	Model 1	Model 2	Model 3	Model 4
Student level				
Engagement T1	.694***	.681***	.683***	.673***
Non-Dutch (cont. Dutch)	.222~	.213~	.191	.225~
Female	.148~	.164*	.167*	.174*
Age	-.050	-.041	-.048	-.048
Parental social-economic status	.011	.019	.018	.003
Internalizing problem behavior	.082~	.065	.063	.060
Externalizing problem behavior	.053	.086	.073	.077
Direct effects				
SS teacher self-efficacy	.138*	.166*	.051	.038
STR – Closeness	.001	-.030	.042	.029
STR – Conflict	-.140*	-.203**	-.132	-.162~
Interactions				
SS TSE * STR – Closeness		-.079*	-.073*	.071
SS TSE * STR – Conflict		-.096**	-.098**	-.130~
Non-Dutch * SS Teacher self-efficacy			.163~	.171~
Non-Dutch * STR – Closeness			-.089	-.084
Non-Dutch * STR – Conflict			-.092	-.059
Non-Dutch * SS TSE * STR – Close				-.186**
Non-Dutch * SS TSE * STR – Conflict				.054
Teacher-level variables				
Ethnic composition classroom	-.140*	-.126*	-.133*	-.103~
Gen. teacher self-efficacy	.023	.009	.006	.021
Variance				
Level 1 (student)	.343***	.327***	.323***	.313***
Level 2 (teacher)	.011	.013	.009	.009
Explained vs previous model	5.5%	1.1%	2.5%	2.4%

Note. Standardized effects are shown. ~ $p < .1$ *$p < .05$, ** $p < .01$, *** $p < .001$.

As illustrated in Figure 3.3, for minority students, teacher self-efficacy had a positive effect on engagement, but this effect was stronger when the relationship with the teacher was experienced as not very close (*B* = 0.324, 95% *CI* [0.199, 0.447]) compared to when the relationship was considered close (*B* = 0.094, 95% *CI* [-0.044, 0.232]). For majority students, however, self-efficacy hardly showed an effect on engagement when relationships were not very close (*B* = -0.033, 95% *CI* [-0.261, 0.194]) while there was a weak, but insignificant, positive effect when the relationship was close (*B* = 0.109, 95% *CI* [-0.087, 0.305]). Comparing these findings, it appears that the effect of teacher self-efficacy on engagement was fairly similar (and not significant) for majority and minority students when the relationship was experienced as close. However, when the relationship lacked this closeness, teacher self-efficacy had no effect on the engagement of majority students, while self-efficacy had a fairly strong effect on the engagement of minority students.

Figure 3.3. *Interaction effects on engagement between teacher self-efficacy, student-teacher closeness, and student ethnicity*



This finding suggests a potentially different meaning of teacher closeness for minority as compared to majority students. Therefore, we further explored the correlates of closeness within each group. Among majority students, conflict and closeness were strongly correlated (*r* = -.60), and closeness was also negatively related to externalizing problem behavior (*r* = -.31). Among minority students, however, conflict and closeness were only moderately correlated (*r* = -.37), and closeness was not related to externalizing problems (*r* = -.09). Therefore, it seems that a lack of closeness was not as problematic for the minority as compared to the majority students in the sample.

3.5 Discussion

The goal of this two-wave longitudinal study was to examine whether teachers' self-efficacy with individual students affects the academic adjustment of these students, whether this impact depended on the quality of the student-teacher relationship, and whether the effects of self-efficacy and relationship quality were different for ethnic minority and ethnic majority students. We expected and found that individual students report more academic engagement over time if their teacher feels more self-efficacious in their interpersonal interactions with them. Although students' academic engagement was considerably stable over time, their teacher's self-efficacy had an overall unique and positive effect. This finding is consistent with the notion that self-efficacious teachers are able to provide adequate supportive behaviors (Abu-Tineh et al., 2011; Almog & Shechtman, 2007; Hamre et al., 2008; A. M. Ryan et al., 2015) which, according to Self-Determination Theory (R. M. Ryan & Deci, 2000a) promote children's experience of autonomous motivation via the satisfaction of their basic needs for relatedness, autonomy, and competence.

Further, we obtained partial support for our hypothesis that children's perceptions of the quality of the relationship with their teacher predicts academic engagement over time. This hypothesis was based on Self-Determination Theory's (R. M. Ryan & Deci, 2000a) claim about the motivational importance of relatedness, and the notion that the student-teacher relationship can function as a secondary attachment bond that provides students with the security and confidence to engage with their school environment (Verschueren & Koomen, 2012). We found that a less conflictual relationship was associated with more student engagement over time, but there was no unique effect of relational closeness. Apparently, the absence of conflict in the student-teacher relationship is more beneficial than the presence of closeness and warmth. This is consistent with the notion of "bad is stronger than good" which has been found in many domain of life and which means that people are more likely to be affected by negative versus positive situations (for a review, see Baumeister et al., 2001).

Additionally, we investigated the interactions between teacher self-efficacy and student-teacher relationship quality. Based on attachment theory (Ainsworth, 1989; Verschueren & Koomen, 2012), we assumed that the perceived relational security and trust generated by high quality

student-teacher relationships is an important basis for students to profit from their teachers' supportive abilities. Therefore, we expected that conflict and a lack of closeness would limit the effect of teacher self-efficacy on students' academic engagement. Our analyses partly corroborate this expectation for relationship conflict but not for relational closeness. We found that the impact of teacher self-efficacy on students' engagement was inhibited when students perceived more conflictual relationships with their teachers, and this held for both ethnic minority and ethnic majority students alike. This indicates that students can profit less from their teachers' self-efficacy when they simultaneously experience the relationship with their teacher as conflictual (see also M. Zee et al., 2017). Thus, even when teachers feel self-efficacious with individual students, this efficacy only benefits student engagement in the absence of relational conflict.

For relational closeness, the interaction effect was not in line with our expectation. Rather, we found a negative interaction effect between closeness and teacher self-efficacy which appeared to hold for minority students only. For majority students, efficacy did not influence academic engagement when the relationship was perceived to be less close, whereas for minority students the effect of teacher self-efficacy was particularly strong when the student-teacher relationship was experienced as less close. We do not have a clear-cut explanation for this finding but suspect that it might have something to do with cultural differences in the interpretation of student-teacher interactions. Our results show that conflict and closeness are strongly related for majority students but not for minority students. This indicates that for majority students lacking closeness in the relationship is likely to go together with conflict, while this is not necessarily the case for minority students.

These different perceptions of interactions with teachers may have to do with different cultural expectations. Many of the minority students included in this study have backgrounds in cultures that can be characterized as power-distant in which respect for adults and authorities and a hierarchical relationship between adults and children is valued (Hofstede, 1991). Ethnic minority children may, therefore, expect relationships with adults to be more formal and distant compared to students with a Dutch background who are more accustomed to informal relationships with adults. Thus, Dutch students may experience a lack of a close teacher relationship negatively, while minority students may perceive these relationships in a more neutral way. Minority students may perceive the behaviors of their self-efficacious teacher as

supportive as long as they do not interpret their student-teacher relationship negatively. More research is needed to test these interpretations, but our further analyses indeed suggest that a lack of closeness is less problematic for the minority than for the majority students in our sample. Most importantly, however, conflict with the teacher was clearly found to negatively affect the engagement of all students, regardless of their ethnic background. This indicates that negative relations elicit similar processes among all students, which resonates with the universal premises of both Self-Determination Theory and attachment theory (e.g. Church et al., 2013; Mesman et al., 2016).

Limitations and Directions for Future Research

In evaluating the findings some limitations should be considered. A first limitation concerns the relatively short time span in which the processes were examined, five months in the second half of the school year. Our findings indicate that academic engagement was relatively stable over this period of time which means that there was little variation to be explained. If we had studied these processes from the beginning of the school year when behavioral patterns are being established and students and teachers are still getting acquainted with one another, we might have obtained stronger effects. Also, our study used two time points only. Although this allowed us to draw conclusions about the direction of effects (Meeus, 2016), using multiple time points over the course of the school year would have strengthened the ability to make causal interpretations (Hamaker et al., 2015). It would also have made it possible to map individual changes in engagement which may take more than several months to develop.

Second our sample was relatively small and future research should include more teachers and students for a more thorough assessment of measurement equivalence between ethnic minority and majority groups. Also, a larger sample would have been preferable to investigate possible differences between ethnic minority groups. We investigated all minority groups together, but specific cultural differences may play a role, for instance with regard to the experience of student-teacher relationships. Our results suggest that closeness with teachers might be interpreted differently by minority and majority students and to investigate such varying interpretations future studies may want to conduct in-depth research with specific ethnic minority groups.

Finally, we were not able to consider other influences on students' academic engagement. We did take into account classroom factors such as general teacher self-efficacy to ensure that the effects tested can be attributed to the individual student-teacher dyad. However, research suggests that need satisfaction across various life contexts is beneficial for school adjustment (King, 2015; Milyavskaya et al., 2009) and future research may therefore want to control for family and peer influences.

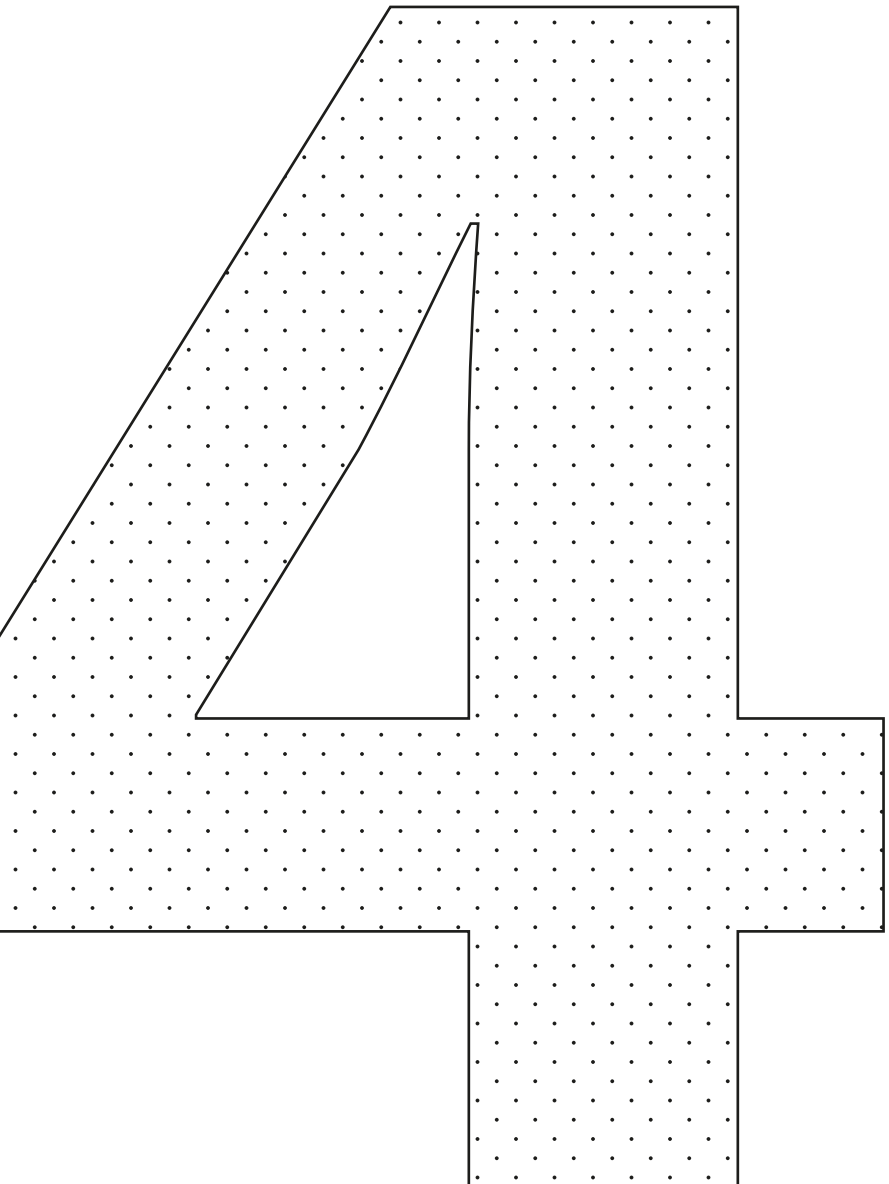
Practical implications

The findings of this study might have some implications for teaching professionals. First, our research has shown that interpersonal interactions between teacher and student are relevant for student engagement, above and beyond more general classroom processes. Previous research has demonstrated considerable within-teacher variation in experiences of student-specific teacher self-efficacy (Geerlings et al., 2018; M. Zee, Koomen, et al., 2016) and the current research indicates that such variation may also affect the academic engagement of students over time. It therefore seems advisable to explore strategies to enhance teacher self-efficacy with individual students. Previous studies have indicated that supportive teaching environments (Klassen & Chiu, 2010; Tschannen-Moran et al., 2007) and professional development courses on mastery experiences (Tschannen-Moran & McMaster, 2009) can be helpful in advancing a general sense of self-efficacy in teachers. Given that teachers tend to feel less efficacious with individual students exhibiting problem behaviors (M. Zee, De Jong, et al., 2016) or with different cultural backgrounds (Geerlings et al., 2018), teacher training within these fields may be especially important to enhance experiences of self-efficacy with individual students.

A second implication is related to the influence of interpersonal student-teacher relationships. Previous studies have shown that interpersonal warmth and conflict can respectively benefit or harm academic developments of students (see Roorda et al., 2017). Additionally, the findings in the current study suggest that self-efficacy is not effective for students' academic engagement when the interpersonal relationship is perceived to be conflictual. Teachers and school psychologists may, therefore, want to invest in preventing or reducing conflicts in relationships with students, for instance through coaching interventions (Jamil, Sabol, Hamre, & Pianta, 2015; Pianta, 2017).

Conclusions

This two-wave longitudinal study illustrates that when teachers feel efficacious with regard to individual students, these students can experience more academic engagement over time. Moreover, student-specific teacher self-efficacy was found to have a positive influence on engagement beyond teachers' general sense of self-efficacy. However, whether students can profit from this teacher self-efficacy depends on the perceived quality of the student-teacher relationship. Self-efficacious teachers are less likely to engage their students when students consider their relationship as being conflictual.



Chapter 4

Student-teacher relationships and ethnic outgroup attitudes among majority students[16]

Abstract

Children's ethnic outgroup attitudes are influenced by their teachers' beliefs and multicultural education. However, research has ignored the possible impact of interpersonal relationships with teachers on students' ethnic attitudes. Three studies, using comparable datasets gathered among native Dutch children (8-13 years) attending grades 4 to 6 in elementary schools in the Netherlands, assess the importance of student-teacher relationships. In Study 1 (N = 389), student-teacher relationships were found to be associated with more positive outgroup attitudes, independent of factors commonly used to explain children's outgroup attitudes. Study 2 (N = 334) replicated these findings and showed that the impact of student-teacher relationships was not a reflection of the perceived teacher norm on multiculturalism. The results of Study 3 (N = 308) show that the association between close student-teacher relationships and children's ethnic attitudes is indirectly associated through internal motivations for intercultural openness, but not through external motivations or intergroup anxiety.

[16] A slightly different version of this chapter has been published as (Geerlings et al., 2017). Geerlings wrote the main part of the manuscript and conducted the analyses. Thijs and Verkuyten substantially contributed to the manuscript. The authors jointly developed the design of the study.

4.1 Introduction

Research has established that children's ethnic outgroup attitudes develop and change over time (Feddes, Noack, & Rutland, 2009; Raabe & Beelmann, 2011), and depend on situational and social-contextual influences (Killen, Hitti, & Mulvey, 2015; McGuire, Rutland, & Nesdale, 2015). Some of this work has focused on the school context by examining ethnic attitudes in relation to classroom ethnic composition (see Thijs & Verkuyten, 2014; Tropp & Prenovost, 2008) and multicultural education programs (for reviews, see Aboud et al., 2012; Bigler, 1999; Stephan, Renfo, & Stephan, 2004), and there also is increasing attention for the role of individual teachers. Research has established, for example, that teachers can affect students' attitudes through the expression of their own views and beliefs on cultural diversity (Grütter & Meyer, 2014; Verkuyten & Thijs, 2013).

However, teachers may influence their students' attitudes not only through their expressed beliefs and teachings, but also through the interpersonal relationships they have with their students. A previous study found that ethnic minority students who shared a closer relationship with their ethnic majority teacher had more positive attitudes towards the ethnic majority group in general (Thijs & Verkuyten, 2012). This finding is consistent with intergroup contact theory (Pettigrew, 1998) which states that the experience of positive meaningful interactions with individual outgroup members increase one's positivity to the outgroup as a whole. Yet, even if students have the same ethnicity as their teachers, their relationships with them may be important for their ethnic attitudes. Same-ethnic relationships do not involve intergroup contact but, as secondary attachment bonds (Ainsworth, 1973), they might provide children with a sense of security that makes them feel more comfortable with ethnic outgroups. We examined this possibility in three studies.

We used data collected among native Dutch primary school students (aged 8-13) and we investigated whether a closer bond with a native Dutch teacher is related to more positive ethnic outgroup attitudes. In the Netherlands, primary school students typically have one or two teachers for the whole year. We examined this bond from the perspective of the children and, to examine the unique association with out-group attitudes, we controlled for ethnic group identification, ethnic classroom composition, gender, age (Studies 1-3), perceived peer acceptance (Study 1), student-parent relationship (Study 2), and perceived teachers'

multicultural norms (Studies 2 and 3). To test the robustness of the association, we also explored whether these control variables moderate the expected association between student-teacher relationship and ethnic attitudes. Finally, we investigated the degree to which this association is mediated by interethnic anxiety and the motivation for intercultural openness (Study 3).

4.2 Theory

Student-teacher relationship as secondary attachment

A growing body of research demonstrates the importance of the student-teacher relationship for children's academic engagement and achievement, and emotional and social development (Davis, 2003; Hamre & Pianta, 2006). Much of the positive effect of the student-teacher relationship can be explained in terms of a so-called secondary attachment (Ainsworth, 1989). Attachment Theory (Ainsworth, 1973; Bowlby, 1982), describes attachment as a deep and enduring affectionate bond between two persons. In young children, the most prominent attachment figure is usually the mother, but in later childhood, other adults such as teachers serve as attachment figures. However, the relationship between teacher and child is not as enduring or as exclusive as the relationship between parent and child. In most educational systems, children change teachers each year. Moreover students have to 'share' their teacher with their classmates, and some classrooms have more than one teacher (Hamilton & Howes, 1992). Teachers are therefore regarded as 'ad-hoc' or 'secondary' attachment figures, who typically tend to engage in affectionate bonds with their students (Verschueren & Koomen, 2012; Zajac & Kobak, 2006).

The sheer amount of time that teachers spend with their students, especially in elementary school, provides many opportunities for children to become attached to their teacher. This secondary attachment to teachers is more obvious among younger children, but it has been found to be important for preadolescents (9-13 years old) as well (Baker, 2006; Little & Kobak, 2003). This secondary attachment may be particularly important when secure parental attachment is lacking (Mitchell-Copeland, Denham, & Demulder, 1997). Nevertheless, even when parental bonds are secure, secondary attachment to teachers can generate additional

positive effects. A strong relationship with the teacher has even been found to outweigh parental support in its influence on academic development (Gregory & Weinstein, 2004), illustrating the considerable formative potential of these student-teacher relationships.

The attachment that teachers provide in the context of the school makes children feel accepted and provides them with a 'secure base' to freely explore their social world (Bergin & Bergin, 2009). Teachers can function as a 'safe haven', a 'place' to return to in times of need and stress (see Verschueren & Koomen, 2012). Knowing there is a significant other who will be there to rely on, provides a sense of confidence and security (Weinfield et al., 2008). This can help children to be less concerned with their personal needs and emotional or physical well-being, and make them more willing to be involved in new and challenging social situations (Bowlby, 1988; Cassidy, 2008). Meeting strangers is such a challenging situation, and according to attachment theory (Bowlby, 1982), children have a natural fear of the unknown which can threaten their sense of security. Theoretically, this fear can extend to people from other ethnic groups. Ethnic outgroup members are relatively unfamiliar and most people tend to find (possible) interactions with ethnic outgroup members challenging and discomforting (Davies et al., 2011; R. N. Turner et al., 2007).

To date, there has been a lack of research on relational security and outgroup attitudes in children but research among adults has found that the experience of relational security can improve outgroup attitudes (Boag & Carnelley, 2012; Hofstra, Van Oudenhoven, & Buunk, 2005; Mikulincer & Shaver, 2001). Two studies have focused on the underlying mechanisms of this effect. Mikulincer and Shaver (2001) showed that participants who were primed with the sense of a secure base were more positive about ethnic outgroups because the sense of security attenuated participants' appraisals of outgroup threat. More recently, Boag and Carnelley (2016) found that the priming of attachment security diminishes outgroup prejudice by temporarily enhancing empathic concern. Thus, and consistent with attachment theory, a sense of relational security can make ethnic outgroups less threatening, but it may also increase one's openness to and interest in these outgroups. In the school context, children's sense of relatedness to their teacher might have similar effects and thereby improve children's outgroup attitudes. In the present research, we tested this proposition, and in Study 3, we examined the roles of intergroup anxiety and the motivation for intercultural openness.

Intergroup anxiety

The relational security provided by attachment figures such as teachers is likely to decrease social anxiety in children which supports their natural tendency to explore their social environment (Cassidy & Shaver, 2008). Research has demonstrated that being securely attached to significant others is related to being less anxious in social encounters with various others (Bohlin et al., 2000; Brumariu & Kerns, 2008; Kestenbaum, Farber, & Sroufe, 1989), including adults (Hazan & Shaver, 1994; Lopez & Brennan, 2000; Mikulincer & Shaver, 2007). By contrast, social anxiety causes children to withdraw from interacting with unfamiliar others (Howes & Hamilton, 1993). More anxious children distance themselves from others, which is reflected in more negative attitudes towards these others (Binder et al., 2009). Furthermore, research has shown that anticipating interactions with ethnic outgroup members already can generate so-called intergroup anxiety (Plant & Devine, 2003; Stephan & Stephan, 1985). The extensive literature on intergroup contact has demonstrated that intergroup anxiety is an important reason for negative ethnic attitudes (Riek et al., 2006; R. N. Turner et al., 2007; Voci & Hewstone, 2003). Social anxiety is likely to affect these attitudes because anxieties cause children to withdraw from interacting with unfamiliar others (Howes & Hamilton, 1993). This leads us to hypothesize that children who feel closer to their teacher will experience less social anxiety about possible interethnic interactions and therefore will have more positive ethnic outgroup attitudes.

Motivation for intercultural openness

A close attachment to their teacher might also affect students' outgroup attitudes by promoting an internal motivation to engage with cultural others. Social psychologists have studied people's motivations to react to ethnic and cultural differences in terms of the regulation of prejudice (Crandall, Eshleman, & O'Brien, 2002; J. M. Hughes, Alo, Krieger, & O'Leary, 2016; Legault et al., 2007), rather than in terms of the motivation to seek and develop positive interactions with cultural others (Siem, Stürmer, & Pittinsky, 2016). The research on the motivation to regulate prejudice has shown that it is important to make a distinction between an *internal* motivation that springs from personal interest and convictions (e.g., enjoy getting to know new people, belief that one should be nice to everyone), and an *external* motivation (e.g., wanting to be liked by others, fearing social sanction). Theoretically, the former should be stronger and more consistently related to people's expression of outgroup attitudes as it implies that individuals have internalized the social norm to be non-prejudiced (Crandall et al., 2002) and

thus personally think it is important to be unbiased and open to other groups. Several studies have supported this claim (e.g., Legault et al., 2007; Plant & Devine, 1998; Thijs, Gharaei, & de Vroome, 2016). In the present research (Study 3), we borrow from this line of work by focusing on children's internal motivation to seek and develop positive interactions with ethnic outgroup peers. We have two reasons to expect that this motivation is affected by the degree of closeness in the student-teacher relationship. First, this motivation includes an intrinsic desire to engage with unfamiliar others, which matches the exploration tendency that is facilitated by a sense of relational security. Second, it involves the basic principle to be prosocial towards out-group members by respecting and accepting them. When people feel securely attached to others they are less focused on their own emotional states and more concerned with the well-being of others (Mikulincer & Shaver, 2007; Mikulincer et al., 2005). A closer student-teacher relationship is thus hypothesized to be related to a stronger internal motivation for intercultural openness, and we test whether this motivation played an intermediate role in the anticipated association between student-teacher relationship and children's ethnic attitudes. To investigate the unique importance of children's internal motivation we also include their external motivation to regulate prejudice. Children can have various simultaneous reasons for intercultural openness and this implies that their internal and external motivations do not have to be mutually exclusive and can even be positively correlated (e.g. Thijs et al., 2016). The sense of acceptance conveyed by a close relationship with their teacher will make students less concerned about social rejection or disapproval. Therefore, we do not anticipate a unique effect of relational closeness on children's external motivation to demonstrate cultural openness.

Overview of the studies

We conducted three studies using comparable datasets (for descriptive statistics see Table 1), gathered among native Dutch children (aged 8-13) in the 4th to 6th grades of elementary schools across the Netherlands. In Dutch elementary schools, children typically have one or two teachers the whole year round, which increases the attachment potential of the student-teacher relationship. In all studies, we examined children's attitudes towards Turks and Moroccans. Both groups are the largest and most typical non-Western ethnic minority groups in Dutch society. They are predominantly Muslim, face much prejudice and discrimination, and are the least-liked groups in the Netherlands, also among young people (Verkuyten & Thijs, 2010). The attitudes toward both groups are strongly related for Dutch majority children (Thijs & Verkuyten, 2012).

In Study 1, we examined if the interpersonal relationship between student and teacher is positively associated with student's ethnic outgroup attitudes. In this analysis we controlled ethnic identification, as this factor is commonly used to explain outgroup attitudes of children (e.g., Levy & Killen, 2010). We also account for the ethnic composition of the classroom, which is often found to be of positive influence (e.g., Thijs & Verkuyten, 2013), because, consistent with contact theory (Pettigrew, 1998), the ability to interact with outgroup classmates is likely to have positive effects on outgroup attitudes. It is important to control for this variable, as student-teacher relationship quality could also explain between-teacher (or between-classroom) variation in those attitudes.

Additionally we took into account the students' perception of peer acceptance to ensure that the effect of the student-teacher relationship cannot be ascribed to children's peer group social standing (Nesdale et al., 2010). In the second study, we investigated the same association controlling for the quality of parent-child relationship in order to be able to estimate the effect of attachment to the teacher independent of attachment to parents. We additionally took the perceived multicultural norms of the teacher into account to assess whether the effect of the student-teacher relationship is found regardless of students' perceived normative classroom climate. In the Netherlands, schools are legally obliged to advance interethnic understanding and to promote positive interethnic relations but there is variation in the extent to which teachers actively express multicultural norms in their classroom (Onderwijsinspectie, 2006). These norms condemn prejudice and discrimination and stress the importance of equality, and therefore they have the potential to improve children's ethnic attitudes (Verkuyten & Thijs, 2013). Thus, we anticipated that children's ethnic attitudes would be positively related to their perceptions of their teachers' multicultural norms and we controlled for these perceptions in our analyses. If we are correct in assuming that teachers influence the outgroup attitudes of their students through their attachment relationship, this influence should exist independently of any perceptions children have of their teachers' multicultural norm. Furthermore, the effect should be similar whether children view their teacher as expressing a weak versus a strong multicultural norm. In Study 2, we also included a measure for children's depressed affect to investigate whether the link between the student-teacher relationship and children's outgroup attitude was not due to internalizing problems which may hinder children in their social interactions. Finally, in the third study, we investigated whether the association between student-teacher relationship and ethnic attitude was statistically indirect through social anxiety

and the internal motivation for intercultural openness. In all studies, we moreover test the robustness of the association between student-teacher relationship and ethnic attitudes by estimating interaction terms between student-teacher relationship with the control variables (age, gender, ethnic identification, peer acceptance and ethnic composition) to ensure that the importance of the student-teacher relationship for outgroup attitudes does not depend on these individual and contextual variables.

4.3 Study 1

Method

Participants and procedure

This study was originally conducted among 572 students from 32 ethnically diverse 4th to 6th grade classrooms within 8 elementary schools across the Netherlands (for classroom ethnic composition, see Table 1). Because our focus is on co-ethnic student-teacher relationships and all students had a teacher with a native Dutch background, we selected those students who could be identified as Dutch. This categorization was based on students' ethnic self-definition and country of birth of both parents; students were therefore only categorized as Dutch if both parents were born in the Netherlands and students also self-identified as Dutch. Of these 402 students, those with missing values (between 0.3 and 2%; Little's MCAR test; $p = .103$) on any of the variables were list-wise deleted, leaving 389 students for the analyses. Within this subsample, students were between 8 and 13 years old ($M = 10.59$, $SD = 1.03$), and 48% was female. After receiving informed parental consent, students anonymously and voluntarily completed a questionnaire in their classrooms.[17]

Measures

To assess the quality of the *student-teacher relationship*, students were asked to complete the Closeness subscale from Student Perception of Relationship with Teacher Scale (SPRTS;

[17] If they had more than one teacher, the children in all studies were asked to complete the questions for the Dutch teacher who was present on the day of the data collection. However, for three classrooms in Study 2 and Study 3 the situation was different (see text). Information on the number of teachers per classroom was not available for Study 1, but respectively 47% and 43% of the students in, respectively, Study 2 and 3 had two teachers rather than one. For both studies, we checked whether the results depended on the number of teachers, but this was not the case. These additional analyses are available on request.

Koomen & Jellesma, 2015). Items of the SPRTS were derived from three sources: the Dutch version of the Student-Teacher Relationship Scale (Koomen, Verschueren, Van Schooten, Jak, & Pianta, 2012), the Network of Relationship Inventory (NRI; Buhrmester & Wyndol, 1987), and the Relatedness Scale (Wellborn & Connell, 1987). The SPRTS includes subscales for closeness, conflict and dependency, and the 'closeness' subscale (6 items; e.g., 'I feel at ease with my teacher', 'If I have a problem, I can talk to my teacher about it') taps into children's feelings of relational security with their teacher (Koomen & Jellesma, 2015). Responses were measured on 5-point Likert scales, ranging from 1 (No, absolutely not!) to 5 (Yes, absolutely!). Confirmatory factor analysis revealed that one of the items did not fit the scale (loading .463) and was thus omitted. A single factor with the remaining 5 items was estimated and showed a good model fit (χ^2 (4) = 10.134, $p < .05$, RMSEA = .063, CFI = .992, $SRMR_{within}$ = .022; loadings between .49 and .68). Cronbach's alpha for this scale was .82.

Children's *ethnic outgroup attitudes* were assessed with two types of measures. First, with two separate questions, the children were asked to indicate their general evaluations of, on the one hand, Turkish- and on the other Moroccan people using a Likert-type response format consisting of seven faces, ranging from very happy (1; big smile) to very sad (7; big frown) with a neutral mid-point (4; straight face). The introduction to these questions was, "The following questions are about how you feel about groups of people in the Netherlands. Pick the face that you choose." The 'seven faces' response format (Yee & Brown, 1992) has been successfully used in previous research among early adolescents (e.g., Verkuyten & Thijs, 2001). The scores were recoded so that a higher score indicated a more positive attitude. The two evaluations of both outgroups were highly correlated (r = .81) and therefore an average score was used.

In addition, participants evaluated Moroccan children on four stereotypic trait dimensions (see e.g., Brown & Bigler, 2002) that have been successfully used in previous research in the Netherlands (e.g. Verkuyten, 2002). Children were asked to indicate on 5-point scales (1 = totally disagree; 5 = totally agree) how much they agreed with each of the following statements; 'I think most Moroccan children are: (a) friendly, (b) honest, (c) fun to play with, and (d) helpful'. Only positive traits were used as previous research has shown that children are more reluctant to evaluate outgroups on negative dimensions (Rutland et al., 2007). Confirmatory factor analysis showed a good model fit (χ^2 (2) = 1.218, $p > .05$, RMSEA = .000, CFI = 1.000, $SRMR_{within}$ = .005; loadings between .76 and .87). These items formed a reliable scale with a

Cronbach's alpha of .88, and therefore an average score was used with a higher score indicating a more positive attitude. The stereotypic measure was positively associated with the global evaluations of Turks and Moroccans ($r = 0.67$).

To assess *ethnic identification*, we used three items that have been used in previous studies in the Netherlands (e.g., Sierksma, Thijs, & Verkuyten, 2014; Verkuyten, 2002). The children, all of whom self-identified as Dutch, were asked to what extent they liked to be Dutch, were proud to be Dutch and found it important to be Dutch (5-point scale). Reliability analysis showed that the last item fitted poorly with the other two items and was thus omitted. The remaining two items were highly correlated ($r = .69$) indicating acceptable reliability. *Perceived peer acceptance* was included as a control variable to be able to investigate whether the effect of the student-teacher relationship is independent of children's general sense of relatedness. We measured this variable with four items adapted from a 10-item measure developed by Rutland and colleagues (2012). These items were selected to diminish the burden of data collection for the participating students, translated by researchers fluent in English and Dutch, and reformulated to pertain to the classroom rather than the school in general. The items were 'Are there many kids in class you can talk to?', 'Are there many kids in class you do fun things with?', 'Are there many kids in class you get along with?', and 'Do most kids in class like you?' The response scale ranged from 1 (No, absolutely not!) to 5 (Yes, absolutely!). The four items loaded on one factor (χ^2 (1) = 13.683, $p > .001$, RMSEA = .182, CFI = .984, SRMR = .022; loadings between .66 and .87) and yielded a Cronbach's alpha of 0.87. Together, the four items were considerably and negatively related to peer victimization (teasing, name-calling, social exclusion) in another sample of Dutch preadolescents (r = -0.46; Thijs & Fleischmann, 2015). Hence, the scale can be considered as an appropriate indicator of children's perceived peer acceptance.

To assess the *ethnic composition of the classroom* we calculated the percentage of students in each classroom who were identified as Dutch students (according to the abovementioned criteria) and the proportion of students who reported that the ethnicity of themselves and their parents was either Turkish or Moroccan (see Table 1). Both variables were strongly and negatively related ($r = -.64$). As it was less skewed, we only included the first variable in the analyses. We further controlled for *age* (measured in years) and *gender* (0 = male, 1 = female).

Data analytic strategy

Because students were nested in their classrooms, their individual answers were not likely to be fully independent. This means that conventional statistical methods might lead to an underestimation of standard errors which could result in spurious significant results (Snijders & Bosker, 1999). To correct for this dependency in the data we analyzed our regression models with multilevel analyses using Mplus version 7 (Muthén & Muthén, 2012). We started our analysis by estimating an intercept-only model including both dependent variables. The intraclass correlations (ICC) were .082 ($p < .05$) for the general outgroup attitudes and .136 ($p <. 05$) for the stereotypes, indicating that respectively 8.2 and 13.6 percent of the total variance in ethnic outgroup attitudes was at the classroom level.

We decided to enter all variables into our analysis as observed rather than latent constructs because using latent constructs resulted in non-identification, due to having more parameters than clusters in the model. All models were estimated using a maximum likelihood estimator and all continuous variables were centered on their mean to enhance the interpretability of the findings. Using a chi-square difference test, we investigated whether the student-teacher relationship is a significant predictor of ethnic outgroup attitudes by comparing the fit of a model with only control variables to a model in which the effect of student-teacher relations is included. Finally, for examining the robustness of the association between student-teacher relationship and ethnic attitudes we estimated interaction terms between student-teacher relationship with age, gender, ethnic identification, peer acceptance and ethnic composition.[18] When these interactions are not significant this would indicate that the importance of the student-teacher relationship for outgroup attitudes does not depend on these individual and contextual variables.

[18] For a randomly selected subsample of students in Study 2 (N = 108) we had information about parental social economic status (SES) as reported by their teacher. Following Van Ewijk and Sleegers (2010) we constructed a composite score for socioeconomic status by adding the scores on parental education (0 = elementary education, 1 = high school/lower vocational education, 2 = higher vocational education/university) and parental employment (0 = both unemployed, 1 = at least one working parent). This scale ranged from zero to three. SES was weakly correlated with closeness (r =.21) and perceived peer acceptance (r = .22) and was not correlated with outgroup attitudes. We also ran regression analyses including SES, which was not found to be associated with outgroup attitudes. Given the limited sample of 108 students and the non-significant results, our main analyses did not include SES as a control variable.

Table 4.1 *Descriptive statistics of measures in all three studies*

Student level	Range	*Study 1* *M* (*SD*)	*Study 2* *M* (*SD*)	*Study 3* *M* (*SD*)
Outgroup attitudes - general	1-7	4.52 (1.68)	4.37 (1.78)	
Outgroup attitudes - stereotypes	1-5	3.32 (.85)		3.53 (.77)
Female (ref. male)	0-1	.48 (.50)	.53 (.50)	.56 (.50)
Age	8-13	10.59 (1.03)	10.49 (.97)	10.14 (.84)
Ethnic identification	1-5	4.64 (.58)	4.03 (.76)	4.58 (.52)
Close student-teacher relationship	1-5	4.21 (.70)	3.69 (.79)	3.80 (.81)
Perceived peer acceptance	1-5	4.21 (.77)	4.07 (.72)	
Depressed affect	1-5		3.59 (.96)	
Close student-parent relationship	1-5		4.56 (.54)	
Teacher's multicultural norms	1-5		3.14 (.93)	2.88 (.96)
Internal motivation	1-5			4.10 (.72)
External motivation	1-5			2.66 (.90)
Intergroup anxiety	1-5			2.65 (1.44)

Classroom level	Range	*Study 1* *M* (*SD*)	*Study 2* *M* (*SD*)	*Study 3* *M* (*SD*)
Composition classroom Dutch	0-1	.69 (.25)	.49 (.29)	.57 (.26)
Composition classroom Turk./Moroc	0-1	.06 (.10)	.24 (.23)	.16 (.17)

Note. Two-sided test * $p < .05$, ** $p < .01$, *** $p < .001$.

Results

Means and standard deviations for the different measures can be found in Table 4.1. In the first model (Table 4.2, model 1); we added all covariates to the model. The results show that ethnic identification and age were not associated with outgroup attitudes. However, children who perceived themselves to be accepted by their peers (*B* = .113) demonstrated more positive general outgroup attitudes, and girls reported more favorable stereotypes than boys did (*B* = .113). Moreover, students in more ethnically diverse schools report more positive attitudes and stereotypes.

The evaluation of the student-teacher relationship was added in model 2 and this variable had a significant independent statistical effect (see Table 2). Children who perceived the relationship with their teacher to be closer, reported more positive ethnic attitudes both on the stereotype measure (*B* = .187) and on the general attitudes measure (*B* = .160). The student-teacher relationship explained an additional 2.6 % of the variance in general outgroup attitudes compared to the model with only covariates, and an additional 3.1 % of the variance in

outgroup stereotypes. Model 2 fitted the data significantly better, indicated by the significant chi-square difference test, $\Delta\chi^2$ (3) =28.200, $p < .001$.

Table 4.2 *Study 1: Multilevel effects of student-teacher relationships on outgroup attitudes.*

	Model 1		Model 2	
	Out. att. faces *B. (S.E.)*	Out. att. stereotypes *B. (S.E.)*	Out. att. faces *B. (S.E.)*	Out. att. stereotypes *B. (S.E.)*
Student level				
Female (ref. male)	.066 (.051)	.113 (.051)*	.072 (.050)	.119 (.050) *
Age	.068 (.061)	.046 (.067)	.076 (.060)	.050 (.066)
Perceived peer acceptance	.113 (.053)*	.078 (.054)	.081 (.054)	.039 (.054)
Ethnic identification	.026 (.054)	.082 (.054)	.005 (.053)	.058 (.054)
Close student-teacher rel.			.160 (.053) **	.187 (.054) ***
Classroom level				
Composition classroom - Dutch	-.601 (.228) **	-.467 (.244)	-.560 (.254) *	-.392 (.263)
χ^2 (df)	63.957 (9)		35.757 (6)	
CFI	.810		.897	
SRMR $_{within}$	.085		.061	
SRMR $_{between}$	.035		.005	
R^2_{within}	.022 (.015)	.028 (.016)	.048 (.023) *	.059 (.024) *
$R^2_{between}$	.361 (.274)	.218 (.228)	.314 (.285)	.154 (.207)

Note. Standardized effects are shown. Both models include correlations between close student-teacher relationships and perceived peer acceptance, and between the two dependent variables for outgroup attitudes. One-sided tests for close student-teacher relationships, others two-sided test * $p < .05$, ** $p < .01$, *** $p < .001$.

Additionally, we analyzed possible interaction effects between the student-teacher relationship and any of the control variables, and none of these effects was significant. This indicates that the positive statistical effect of the student-teacher relationship was similar for older and younger children, boys, and girls, for varying levels of peer acceptance and ethnic identification, and in classrooms with different percentages of ethnic minority students.

Discussion

The results of Study 1 show that when majority group children experience a closer relationship with their teacher, they have more positive attitudes (general attitudes and stereotypes) towards ethnic outgroups. This association existed independently of a general sense of relatedness (i.e.,

the extent to which children feel accepted by their peers), ethnic identification and ethnic school composition. Further, the association was robust because it was similar for girls and boys, for the different age groups, for levels of peer acceptance, for levels of ethnic identification, and for the ethnic composition in the classroom.

4.4 Study 2

In the second study, we examined the association between the student-teacher relationship and children's ethnic outgroup attitudes by considering three additional factors. First, if we are correct in assuming that the student-teacher relationship matters for students' ethnic attitudes than this association should exists independently of the perception of a multicultural teacher norm. Research has demonstrated that school norms about diversity are associated with more positive student attitudes towards social outgroups (Grütter & Meyer, 2014; Solomon, Watson, Battistich, Schaps, & Delucchi, 1996; Verkuyten & Thijs, 2013). Therefore, we included children's norm perceptions in this study.

Second, one could argue that the effect of the student-teacher relationship on outgroup attitudes reflects children's general sense of relational security rather than their specific attachment to their teacher. Parents usually are the primary attachment figures and this attachment might generalize to other attachment figures, such as the teacher (Verschueren & Koomen, 2012). Thus, it could be that parental attachment rather than teacher attachment that is an important factor. To assess whether the relationship with the teacher has a unique and independent effect on ethnic outgroup attitudes we added a measure of the quality of the parent-child relationship.

Third, we controlled in the analyses for children's depressed affect. It could be that the association between relational closeness and outgroup attitudes is due to their relations with third variables and therefore spurious. Depressed affect could be such a third variable, as children with internalizing problems have been found to share less close relationships with their teachers (Baker, 2006) and the principle of self-congruity suggests that negative self-feelings are associated with negative feelings towards others (Ehrlich, 1974).

Method

Participants and procedure

The second study was conducted among 888 children in 18 elementary schools across the Netherlands. The children all attended 4th to 6th grade classrooms (N = 36) which were all taught by native Dutch teachers. Given our focus on co-ethnic student-teacher relationships, we again only selected native Dutch students. Students were included only if they self-identified as ethnic Dutch, and, additionally, indicated that both their parents were born in the Netherlands (N = 401). Students with missing values (between 1 and 8%; Little's MCAR test; p =.271) on any of the variables used in the analysis were list-wise deleted, leaving 334 students for the analyses. Within this sub-sample, students were between 9 and 13 years old (M = 10.49, SD = .97) and 53% was female. After getting informed parental consent (obtained for 96% of the students that were initially approached), the students anonymously and voluntarily responded to a questionnaire in their classrooms.

Measures

The quality of the *student-teacher relationship* was again measured with the 6 items (α = .85) of the closeness subscale of the SPRTS (Koomen & Jellesma, 2015). These items loaded on a single factor that had good model fit (χ^2 (9) = 21.499, p < .05, RMSEA = .064, CFI = .983, $SRMR_{within}$ = .027; loadings between .61 and .88). Children's *outgroup attitudes* were measured with the 'seven faces' scale in relation to the Turkish and Moroccan outgroups (r = .77). No stereotype measures were available for this study. The quality of the *student-parent relationship* was assessed by adjusting the SPRTS closeness subscale (Koomen & Jellesma, 2015) to the context of the parents. The scale consisted of 6 items (e.g., 'I feel at ease with my parents', 'If I have a problem, I can talk to my parents about it'), which together formed a reliable scale (α = .85). Confirmatory factor analysis showed that these items formed a single factor with a good model fit (χ^2 (9) = 15.801, p > .05, RMSEA = .048, CFI = .991, $SRMR_{within}$ = .023; loadings between .61 and .80).

For measuring the *perceived multicultural teacher norm,* we used three items which have been successfully used in previous research in the Netherlands (Verkuyten & Thijs, 2013): 'Does your teacher ever say that all cultures should be respected?', 'Does your teacher ever say that it is wrong to discriminate?', and 'Does your teacher ever say that people from all cultures are

equal?' The response scale ranged from 1 (absolutely never!) to 5 (very often!) and alpha was .75. Confirmatory factor analysis with these three items revealed a reasonable model fit (χ^2 (1) = 6.551, $p < .05$, RMSEA = .129, CFI = .976, $SRMR_{within}$ = .030; loadings between .67 and .86). We also calculated the ICC of these norms using information of all students in the original data set (Dutch and non-Dutch), thus examining how much of the variation in individual perceptions was shared by students of the same teachers. Multilevel analyses revealed that a significant part of the variance in the norm perceptions (18.53%, $p < .001$) could be explained by differences between teachers, indicating that there was relative agreement among students with the same teacher.

Ethnic identification was assessed with the same three items that were used in Study 1. Confirmatory factor analysis showed that the three items loaded on one component explaining 61.47 percent of the variance (χ^2 (1) = 6.046, $p < .05$, RMSEA = .123, CFI = .976, $SRMR_{within}$ = .030; α = .68). *Perceived peer acceptance* was measured with the same four items as in Study 1 (α = .85, CFA: χ^2 (2) = 12.803, $p < .01$, RMSEA = .127, CFI = .982, $SRMR_{within}$ = .027; loadings between .59 and .84).

Children's *depressed affect* was measured with three items adapted from the Profile of Mood States (McNair, Lorr, & Droppleman, 1971): "Some children are sometimes sad. How about you?", "Some children are nervous. How about you?", and "Some children are often afraid. How about you?" The response scales ranged from 1 (No!) to 5 (Yes!), and the three items loaded on a single factor (χ^2 (1) = 9.168, $p < .01$, RMSEA = .156, CFI = .973, $SRMR_{within}$ = .041; loadings between .76 and .82).

We obtained two measures for *classroom ethnic composition* by calculating the percentage of students identified as Dutch (according to the abovementioned criteria) and the percentage of students who self-identified as Turkish or Moroccan (see Table 1). As in Study 1, these percentages were negatively related (r = -.81) and we only included the percentage of Dutch students in our analysis.

Data analytic strategy

In Study 2, three of the classrooms were taught by two teachers and students were randomly assigned to fill in their questionnaires about one of the two teachers. To make sure students

remembered to assess only the teacher assigned to them, the name of the teacher was written down above all questions pertaining to the teacher. Similar to Study 1 we conducted multilevel analyses using Mplus version 7. Again, all models were estimated using the ML estimator. The intraclass correlation, which was calculated after estimating an intercept-only model, revealed that 19.3 percent of the total variance in ethnic outgroup attitudes existed at the classroom level.

All variables were added to the model as observed rather than latent constructs, because the latent models resulted in model non-identification (due to having more parameters than clusters in the model). In our first model, we tested the effect of student-teacher relationship on outgroup attitudes while controlling for the covariates. In a second model, we included the effect of student-parent relationship and in a third model we tested the effect of teachers' perceived multicultural norms. Further, we examined whether the association between student-teacher relationship and ethnic attitudes was robust across all control variables, the student-parent relationship, and the multicultural norm.

Results

The first model (see Table 4.3) shows that gender, age, and depressed affect were not associated with outgroup attitudes. Stronger ethnic identification was associated with less positive outgroup attitudes and higher perception of peer acceptance was associated with more positive attitudes. Further, in ethnically more diverse schools, students had attitudes that are more positive. More importantly, and similar to Study 1, a closer student-teacher relationship was independently associated with a more favorable ethnic outgroup attitude ($B = .139$, $p < .05$). This model showed a poor model fit (χ^2 (8) = 29.424, $p < .001$, RMSEA = .082, CFI = .625, SRMRwithin = .059, $SRMR_{between} = .001$), but did explain a significant 9.6 percent of variance in outgroup attitudes at the student level.

In model 2, we added the effect of the student-parent relationship which was not significantly associated with outgroup attitudes. Also, the effect of the student-teacher relationship remained significant when adding this variable to the model, but the model did significantly improve compared to model 1 ($\Delta\chi^2(4) = 9.508$, $p < .05$). Finally, model 3 shows that students who perceived their teacher to display more positive norms about multiculturalism demonstrated more positive outgroup attitudes ($B = .170$). The fit of this model did

significantly improve compared to model 2 ($\Delta\chi^2$ (3) = 8.372, $p < .05$). However, the positive effect of the student-teacher relationship on outgroup attitudes remained significant ($B = .105$, $p < .05$).

Additional analyses for assessing the robustness of the findings showed that there were no significant interaction effects between the student-teacher relationship and all other variables included in the model, except for age. Although younger and older children reported similarly positive outgroup attitudes and close relationships (i.e., means are not significantly different (ANOVA); respectively $F = .531$, $p = .71$, $F = .283$, $p = .89$), the negative interaction between the student-teacher relationship and age ($b = -.286$, $p < .05$), indicating, as illustrated in Figure 1, that for younger children (-1 *SD*) closeness with their teacher was somewhat more strongly associated with outgroup attitudes ($b = 3.967$, $p < .05$) than for older students ($b = 3.521$, $p < .05$). However, this interaction was small and explained less than one percent of the variance in both dependent variables.

Table 4.3 *Study 2: Multilevel effects of student-teacher relationships on outgroup attitudes(-faces).*

	Model 1	Model 2	Model 3
	B. (S.E.)	*B. (S.E.)*	*B. (S.E.)*
Student level			
Female (ref. male)	.038 (.055)	.038 (.055)	.039 (.054)
Age	.037 (.066)	.037 (.066)	.007 (.065)
Perceived peer acceptance	.184 (.055) ***	.172 (.057) **	.161 (.056) **
Ethnic identification	-.168 (.055) **	-.176 (.055) ***	-.158 (.055) **
Depressed affect	.022 (.055)	.024 (.055)	.022 (.054)
Close student-teacher relationship	.139 (.057) *	.125 (.059) *	.105 (.059) *
Close student-parent relationship		.063 (.059)	.058 (.058)
Teacher's multicultural norms			.170 (.056) **
Classroom level			
Composition classroom - Dutch	-.606 (.198) **	-.587 (.205) **	-.518 (.232) *
χ^2 (df)	29.424 (8) ***	38.932 (12) ***	47.304 (15) ***
CFI	.625	.753	.736
$SRMR_{within}$	.059	.065	.062
$SRMR_{between}$	.001	.001	.003
R^2_{within}	.096 (.035) **	.102 (.037) **	.120 (.037) ***
$R^2_{between}$	.368 (.240)	.345 (.241)	.268 (.241)

Note. Standardized effects are shown. Models include correlations between close student-teacher relationships and perceived peer acceptance, between close student-teacher relationships and student-parent relationships, and between student-parent relationships and perceived peer acceptance. One-sided tests for close student-teacher relationships, close student-parent relationships and teacher's multicultural norms, others two-sided test. * $p < .05$, ** $p < .01$, *** $p < .001$.

Discussion

Similar to Study 1, the results of Study 2 demonstrate that students' ethnic outgroup attitudes are associated with their relationship with their teacher. The closer students perceived this relationship to be, the more positive they were about the ethnic outgroups. This association was found independently of factors that are often used to explain ethnic outgroup attitudes among children, such as ethnic identification, perceived peer acceptance, and the ethnic composition of the classroom. Moreover, this association was found when controlling for the relationship with the parents, which indicates that the association cannot be attributed to a general sense of attachment. Furthermore, while norms about multiculturalism as expressed by the teacher were found to be important for children's ethnic attitudes (Verkuyten & Thijs, 2013), the interpersonal relation with the teacher was an additional factor. In addition, there was no interaction between the teacher norms and the quality of the student-teacher relationship. This illustrates that the student-teacher relationship is associated with students' ethnic outgroup attitudes regardless of the multicultural norms set by their teacher. Unlike we found in Study 1, there was an interaction between the student-teacher relationship and student age indicating that the effect of the relationship was slightly stronger for younger versus older students. This suggests that the attachment function of the student-teacher bond might be more relevant for younger children. However, the size of this interaction was small, and the relationship effect held for students of all ages.

4.5 Study 3

We conducted a third study to investigate the association between the student-teacher relationship and ethnic attitudes in more detail. We set out to examine two possible mechanisms behind this association. We predicted that the relational security provided by a close student-teacher relationship reduces children's intergroup anxiety and increases their internal (but not external) motivation for intercultural openness. Both processes, in turn, were expected to lead to more positive ethnic outgroup attitudes. To diminish the burden of data collection, and because Study 1 indicated that the effects were slightly stronger for the stereotype measure as compared to the seven-faces scales, children's ethnic attitudes were measured with out-group stereotypes only.

Method

Participants and procedure

This study was conducted among 800 students in 23 schools across the Netherlands. Of these students, 363 could be identified as native Dutch children (using the same procedure as in Studies 1 and 2) who attended 4th to 6th grade classrooms (N = 40) taught by native Dutch teachers. All students with missing values (between 1 and 8%; Little's MCAR test; p = .258) on any of the variables used in the analysis were list-wise deleted, leaving 308 students for the analyses. The students were between 8 and 12 years old (M = 10.15, SD = .84) and 56% was female. After obtaining informed consent (obtained for 98% of the children that were initially approached), the students anonymously and voluntarily filled in a questionnaire in their classroom.

Measures

The quality of the *student-teacher relationship* was assessed with the same six items as in Study 2: χ^2 (9) = 16.205, p = .06, RMSEA = .051, CFI = .986, $SRMR_{within}$ = .030; loadings between .56 and .71, with an alpha of .80. *Ethnic outgroup attitudes* were assessed by using the stereotypic trait evaluations used in Study 1 ("honest; fun to play with; helpful") but this time with regard to both Turkish and Moroccan minority peers (CFA, formed a single factor: $\chi^2(3)$ = 5.976, p = .11, RMSEA = .057, CFI = .997, $SRMR_{within}$ = .018; loadings between .55 and .78; α = .88).

Intergroup anxiety was measured with six items that were developed for this study. They followed a brief introduction: 'Imagine that a new group of children from another country would join your classroom. You do not know these children. Your teacher asks you to work on a project with these children in the hallway.' Subsequently students were asked where they would (1) like doing this, (2) find this scary, (3) feel alone, (4) be nervous, (5) be a bit afraid, and (6) would like these children. Items were answered on a 5-point Likert scale (1 = No, definitely not! – 5 = Yes, definitely!). Confirmatory factor analysis revealed that the two positively worded items did not fit the scale (with factor loadings of .27 and .26; other items > .56). The remaining items (2-5) formed a reliable scale for intergroup anxiety (χ^2 (2) = 44.931 p <.001, RMSEA = .264, CFI = .957, $SRMR_{within}$ = .069; loadings between .79 and .90; α = .93).

Children's *motivation for intercultural openness* was assessed with a measure based on the work of Legault and colleagues (2007) and Plant and Devine (1998). Students were presented with six different reasons for being "nice to children from other countries or cultures". Three of these reasons were internal ("because I want to get to know them", "because I think everyone is equal', and "because I think it is important to be nice to others"), and three were external ("because I want others to like me", "because other people expect me to", and "because people might think I am mean"). Students answered on 5-point Likert scales (1 = No! – 5 = Yes). Confirmatory factor analysis showed that the internal items loaded on one factor and the external reasons on another (χ^2 (8) = 25.948, $p < .01$, RMSEA = .085, CFI = .914, $SRMR_{within}$ = .060). Factor loadings for each of the factors were estimated between .54 and .86 (internal motivation, α = .59; externalizing motivation, α = .61).

We again considered the perceived multicultural teacher norm, measured with the same three items as in study two (χ^2 (1) = .323, p = .57, RMSEA = .000, CFI = 1.000, $SRMR_{within}$ = .008; α = .69). The ICC of this norm, using information of all students in the original data set (Dutch and non-Dutch), was calculated and this revealed that a significant part of the variance in multiculturalist norm (13.7%, $p < .001$) could be explained by differences between teachers. This indicates that students of the same teacher had relatively similar perceptions of the multicultural norms.

Ethnic identification was assessed with the three items used in the previous studies (χ^2 (1) = .719, p = .40, RMSEA = .000, CFI = 1.000, $SRMR_{within}$ = .014; α = .50). The measures for *classroom ethnic composition* (see Table 1) were similar to those used in Study 1. Again, the percentage of Dutch students was negatively related to the percentage of Turkish or Moroccan students (r = -.81), and we only included the former in our analyses.

Data analytic strategy

In Study 3, twelve of the classrooms were taught by two teachers. Students were randomly assigned to fill in their questionnaires about one of the two teachers. To make sure students remembered to assess only the teacher assigned to them, the name of the teacher was written above all questions pertaining to the teacher. We again conducted multilevel analyses and all models were estimated using the ML estimator. We calculated the intraclass correlation of ethnic outgroup attitudes which was estimated with an intercept-only model at .008, indicating

that 0.8 percent in outgroup attitudes was at the classroom level. Estimation of latent variables on outgroup attitudes resulted in non-identification due to estimating a higher number of parameters than clusters. Thus, all variables were added to the model as observed rather than latent constructs. In the first model, we added the direct effect of the student-teacher relationship along with the covariates. Subsequently, we added to the model the direct effects of internal and external motivation for intercultural openness and the direct effect of intergroup anxiety. In Model 3, we tested the expected indirect effects using the model indirect option in Mplus.[19]

Results

As expected and similar to the first two studies we again found (Table 4.4, Model 1) that students who experienced a closer relationship with their teacher expressed more positive outgroup attitudes (B = .178, p < .01). Furthermore, additional analyses showed that this association was robust across age, gender, ethnic identification, and ethnic composition because none of the interaction effects was significant.

In Model 2, the intermediate variables were added to the model. The results show that external motivation for intercultural openness was not independently related to outgroup attitudes. However, higher levels of intergroup anxiety (B = -.126, p < .05) and a stronger internal motivation for intercultural openness (B = .488, p < .001) were associated with more positive ethnic attitudes. The effect of the student-teacher relationships became non-significant by adding these variables to the model.

In Model 3, we tested the full indirect model, in which we added the direct effect of the student-teacher relationship on intergroup anxiety and the internal motivation for intercultural openness. To retain parsimony, the external motivation was no longer included in this model. The analysis showed that a closer student-teacher relationship was not related to intergroup anxiety but was positively related to intercultural openness. Estimation using the Model

[19] For a subset of children (N = 52) teacher reports of internalizing problems were available, measured via the emotional problems subscale of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997, 2001) (Cronbach's α. =.77). Additional analyses showed that these problems were not related to closeness, intergroup anxiety, and the motivations for intercultural openness. We also ran regression analyses including internalizing problem behavior, which was not found to be associated with outgroup attitudes and did not affect the effects of the other variables in the model. Hence, we did not include internalizing problem behavior as a control variable in our main analyses.

Indirect option in Mplus, showed that the indirect effect through intercultural openness was positive and significant ($B = .124$, $p < .001$), while the indirect effect through intergroup anxiety was not ($B = -.009$). Because the direct effect of the student-teacher relationships was no longer significant, it appears that the indirect association via intercultural openness explains the association between the student-teacher relationship and students' outgroup attitudes.

Table 4.4 *Study 3: Multilevel effects of student-teacher relationships on outgroup attitudes (stereotypes) via mediation.*

	Model 1	Model 2	Model 3		
	Outgroup attitudes *B (SE)*	Outgroup attitudes *B (SE)*	Outgroup attitudes *B (SE)*	Internal openness *B (SE)*	Intergroup Anxiety *B (SE)*
Student level					
Female (ref. male)	.133 (.060) *	.068 (.051)	.074 (.049)	.123 (.054) *	-.057 (.054)
Age	.037 (.051)	.027 (.050)	.033 (.049)	.008 (.054)	.000 (.054)
Tch. multicult. norms	.115 (.059) *	.044 (.051)	.043 (.050)		
Ethnic identification	.088 (.080)	.045 (.051)	.040 (.050)		
Close st-tch relation.	.178 (.067) **	.075 (.052)	.072 (.051)	.275 (.052) ***	.073 (.057)
Internal openness		.488 (.049) ***	.473 (.048) ***		
External openness		-.043 (.051)			
Intergroup anxiety		-.126 (.057) *	-.127 (.056) *		
Classroom level					
Comp. class - Dutch	-.584 (.716)	-.798 (.789)	-.806 (.716)		
χ^2 (df)	.045 (0) ***	68.455 (15) ***	18.701 (4) ***		
CFI	1.000	.674	.897		
SRMR $_{within}$	.000	.078	.040		
SRMR $_{between}$	.033	.061	.061		
R^2_{within}	.084 (.035) *	.271 (.042) ***	.292 (.044) ***	.093 (.032) **	.008 (.010)
$R^2_{between}$	.342 (.837)	.637 (1.259)	.650 (1.351)		

Note. Standardized effects are shown. Models include correlations between internal and external motivations for openness and between both motivation variables and anxiety (model 2), and between internal openness and intergroup anxiety (models 2 and 3). One-sided tests for close student-teacher relationships and mediating variables, others two-sided test. * $p < .05$, ** $p < .01$, *** $p < .001$.

Discussion

Study 3 again shows that the student-teacher relationship played a unique role in explaining students' outgroup attitudes, independently of ethnic identification, perceived multicultural teacher norms, age, and ethnic composition. Further, we found evidence that the internal motivation for intercultural openness explained the association between the student-teacher relationship and ethnic attitudes. Intergroup anxiety and the external motivation did not play an intermediate role. Thus, if students were closer to their teachers, they were more internally

motivated be seek and develop positive interactions with outgroup peers and this was related to more positive ethnic outgroup attitudes.

4.6 General Discussion

The influence of teachers on their students' ethnic outgroup attitudes has been examined in terms of teachers own cultural diversity beliefs (Grütter & Meyer, 2014; Verkuyten & Thijs, 2013) and multicultural education programs (Besley & Peters, 2012; Bigler, 1999), but the interpersonal relationship between student and teacher has been ignored. We focused on co-ethnic student-teacher relations and findings of three studies demonstrate that students who experienced a closer relationship with their teacher had more positive attitudes towards ethnic outgroups. This association was found for general outgroup feelings and for stereotypes and when controlling for factors that are commonly used to explain ethnic prejudice among children (e.g., ethnic composition of the classroom, ethnic identification). Further, the association was independent of the perceived multicultural norms expressed by the teacher and could not be attributed to students' perception of peer acceptance or the strength of the student-parent relationship. Moreover, the association was robust across gender, age, ethnic identification, classroom composition, relationship with parents and peer acceptance. Taken together these findings strongly suggest that the quality of the student-teacher relationship is relevant for children's ethnic outgroup attitudes. This means that ethnic attitudes in the classroom do not only depend on the classroom composition and on multicultural education but also on the interpersonal relationship between teacher and child. Furthermore, the findings indicate that the student-teacher relationship is not only relevant for children's academic engagement and development (Davis, 2003; Hamre & Pianta, 2006) but for their ethnic attitudes.

Study 3 demonstrates that the association between the student-teacher relationship and ethnic attitudes can be explained by the internal motivation for seeking and developing positive interactions with outgroup members (intercultural openness). Students who felt closer to their teacher were more internally motivated to be open to peers from other cultural backgrounds, and this motivation was, in turn, related to more positive attitudes towards ethnic outgroups.

The external motivation for intercultural openness was not found to be related to outgroup attitudes. These findings correspond with previous work on the motivation to control prejudices that has found that internal but not external motivations are associated with more positive outgroup attitudes (Legault et al., 2007; Thijs et al., 2016). Our findings indicate that a good relationship with the teacher can stimulate children's internal motivation to seek and develop positive outgroup interactions. This suggests that teachers can influence motivations of students other than those related to academic engagement and achievement (Furrer & Skinner, 2003; Stroet, Opdenakker, & Minnaert, 2013).

Unexpectedly, children's intergroup anxiety was related to outgroup attitudes, but not to student-teacher relations. This suggests that the security derived from a close relationship with one's teacher, as an 'ad-hoc' or 'secondary' attachment figure (Verschueren & Koomen, 2012; Zajac & Kobak, 2006), does not lead to lower concern about having to interact with unknown ethnic outgroup peers. This might indicate that reduced intergroup anxiety requires an attachment relationship that is more permanent and exclusive than with teachers. Perhaps the security that teachers offer is restricted to the school context and does not affect children's social anxiety more generally. However, it should be noted that the measure likely assessed both social and interethnic anxieties simultaneously. Future research should examine this further by assessing both intergroup anxiety and social anxiety more specifically.

In Study 2, the relationship between students and parents was not associated with children's ethnic outgroup attitudes. This is surprising because the relationship with parents is usually stronger than with teachers (Verschueren & Koomen, 2012), and therefore the parental relationship should make more of a difference. One possible explanation is that when asked in the context of their classroom, students interpret questions on ethnic outgroups in relation to peers in the classroom setting, even if this setting is not specified in the questions. In Study 1, the student-teacher relationship was found to be more strongly associated with outgroup stereotypes that referred to peers than with general outgroup attitudes. The reference to peers might have made the classroom setting more salient. When the students did indeed interpret the outgroup attitudes in relation to the classroom this could explain why the relationship with the teacher was more important than the parental relationship. This explanation implies that teachers are particularly important for the ethnic attitudes that children develop and express in

the classroom but that parents might be more important for children's ethnic attitudes in other social settings. Future research should systematically examine this possibility.

Limitations

Several limitations should be acknowledged and discussed. First, our use of cross-sectional data prevents us from establishing causal directions and entails the risk of third-variable explanations. Although we showed that children's depressed affect could not account for the link between the student-teacher relationship and children's ethnic attitudes, we cannot rule out the possibility of other, dispositional third variables. Moreover, although theoretically less likely, it is possible that students' ethnic attitudes also affect the relationship with their teacher. Longitudinal research could shed light on this issue, but it faces the problem that children tend to have another teacher every year. It might also be possible to use an experimental design to test the causal impact of the proposed underlying mechanisms of motivations for intercultural openness and intergroup anxiety. Further, other mechanisms could also be considered for understanding why the student-teacher relationship might affect children's ethnic attitudes, such as sense of security and classroom belonging.

Second, our research relied on student reports, which means that we cannot rule out the possibility of common method variance. Future research could try to replicate our findings by using different informants. This might be difficult, however, as our theoretical interest is in students' experience of the student-teacher relationship, and their own ethnic attitudes. Still, there is partial overlap between teachers' and students' relationship reports (Koomen & Jellesma, 2015) and future studies could consider the perspective of the teacher. This might be important for possible interventions to improve children's ethnic outgroup attitudes by improving the student-teacher relationship (Pianta, 1999). Intervention programs often try to help teachers to reflect on their interactions with individual students and this appears to be effective in improving these relationships (e.g., Spilt, Koomen, Thijs, & Van der Leij, 2012), and therefore might have a favorable effect on children's ethnic attitudes.

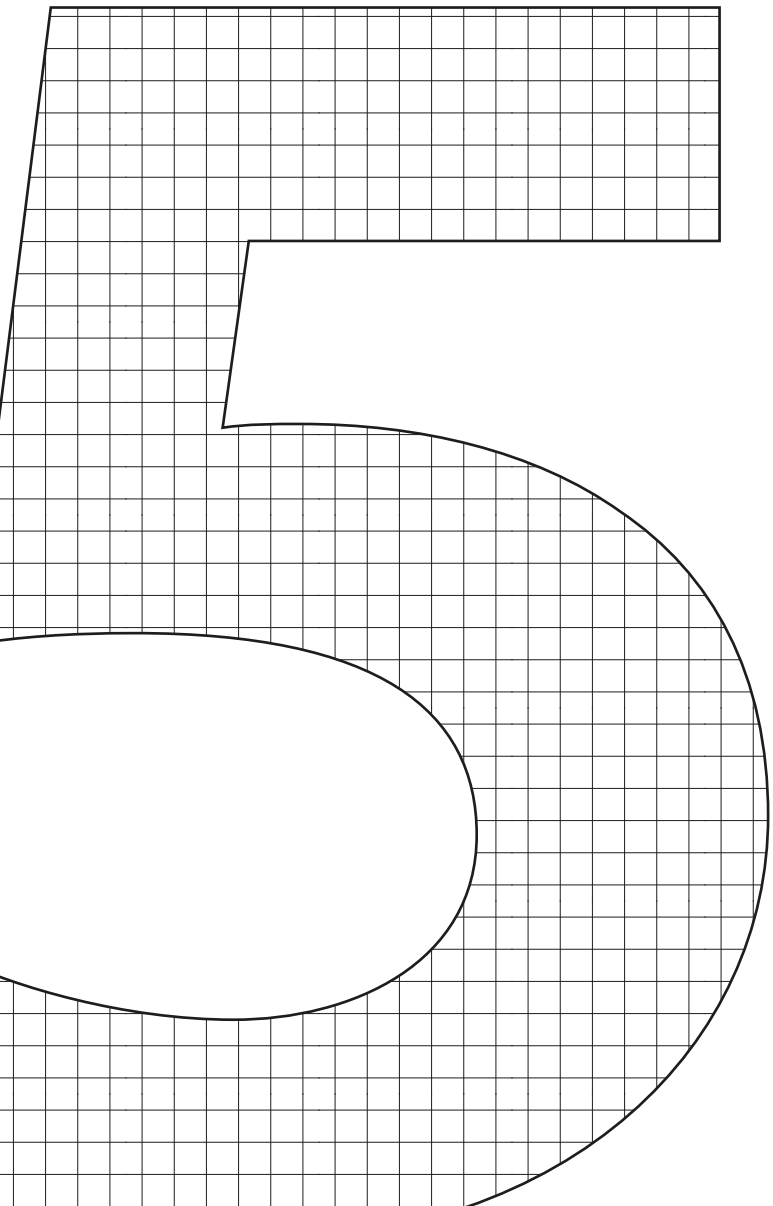
A third limitation to our study involves the assessment of students' outgroup attitudes by means of a single-item seven faces measures. Although these measures have been successfully used in many previous studies (e.g., Verkuyten & Thijs, 2001b; Yee & Brown, 1992), they seem to be somewhat crude and open to varying interpretations depending on the social context in which

the question is raised. Fortunately, the validity of these scales was supported by their strong correlations with the more subtle stereotype measures in Study 1. In fact, effect sizes for student-teacher relationships were generally somewhat stronger for the latter, possibly because they explicitly referred to children, making the question better relatable to students' school context. Further research is needed to examine how these ethnic attitudes questions are interpreted among students.

Fourth, we have focused on the attitudes of majority group students (native Dutch) and their relationship with majority group teachers. We do not know whether the findings generalize to minority group students and their relationships with minority group teachers. In the Netherlands, most teachers are native Dutch, but in other countries, the question of generality could be examined. Furthermore, the student-teacher relationship can be cross-ethnic which means that future studies can also examine ethnic outgroup attitudes among majority group students with an ethnic minority teacher and minority group students with an ethnic majority teacher. These cross-ethnic relationships additionally involve processes of intergroup contact (Pettigrew, 1998) which might mean that the student-teacher relationship is more important for ethnic outgroup attitudes compared to when student and teacher are of the same ethnic background (Thijs & Verkuyten, 2012).

Conclusions

For the first time and with three studies we have demonstrated that the interpersonal relationship between students and teachers is relevant for children's ethnic outgroup attitudes. Schools are important settings for preparing children for the increasingly culturally diverse world they live in. In many countries, schools try to teach students about cultural differences and stimulate tolerant attitudes. Although our findings need to be replicated and substantiated by further research, our studies indicate that not only classroom composition and forms of multicultural education are important for this but that the relationships that teachers develop with their students also matter. Apparently, a close student-teacher relationship is not only relevant for children's academic engagement and their emotional and social adjustment, but also for the development of positive ethnic outgroup attitudes.



Chapter 5

Preaching and practicing multicultural education: Predicting students' outgroup attitudes from perceived teacher norms and perceived teacher- classmate relations [20]

Abstract

Research on the role of teachers in bringing about positive interethnic attitudes among their students has largely focused on the norms teachers express about cultural diversity in the classroom without considering teacher's enactment of these norms in their relationships with students. The current study assessed to what extent students' ethnic outgroup attitudes are affected by perceived positive teacher norms about cultural diversity, together with perceived positive teacher-classmate interactions that may serve as an example to students. We investigated whether and how teacher norms and practices interact to affect students' attitudes, and whether these effects may differ for minority and majority students. Data was gathered in two waves among 186 native (majority) Dutch students, and 129 students with a Turkish-Dutch, or Moroccan-Dutch (minority) background in 29 4th-6th grade classrooms. Results showed that both majority and minority students expressed more positive attitudes toward ethnic outgroups when they perceived their teacher to have a positive relationship with their majority classmates, but only when supported by positive teacher norms. Ethnic majority students had more favorable outgroup attitudes when perceiving positive teacher relationships with minority classmates, but only in the absence of positive teacher norms. These results indicate that students in culturally diverse classrooms consider their teachers' interpersonal relationships with classmates to inform their own attitudes about ethnic outgroups.

[20] A slightly different version of this chapter has been published as Geerlings, J., Thijs, J. T., & Verkuyten, M. (2019). Preaching and practicing multicultural education: Predicting students' outgroup attitudes from perceived teacher norms and perceived teacher- classmate relations. *Journal of School Psychology*. Geerlings wrote the main part of the manuscript and conducted the analyses. Thijs and Verkuyten substantially contributed to the manuscript. The authors jointly developed the design of the study. We want to thank Dr. Linda R. Tropp for her notes and discussion on a preliminary version of this manuscript.

5.1 Introduction

An important question in today's ethnically diverse societies is how to foster positive interethnic attitudes in young people. There is ample evidence that the effects of experiencing prejudice and discrimination are psychologically harmful (M. T. Schmitt, Branscombe, Postmes, & Garcia, 2014) and negative ethnic peer relations can undermine the psychological and academic adjustment of both minority and minority youths (C. S. Brown, 2017). Schools are vital contexts for advancing positive intergroup relations among children from an early age onwards, and many educational initiatives and intervention programs have been developed to improve interethnic attitudes in children and adolescents. There are different variants of this so-called diversity education, but multicultural education is the most important one in the US and relevant in Europe as well (for reviews, see Bigler, 1999; Ülger, Dette-Hagenmeyer, Reichle, & Gaertner, 2018; Verkuyten & Thijs, 2013). Multicultural education involves a range of different practices and ideas and prejudice reduction is one of its key components (Banks, 2004). Although some multicultural educational initiatives have positive effects on students' evaluations of ethnic outgroups (i.e., groups other than their own), overall they appear to be moderately successful and studies have also reported mixed or negative findings (Aboud et al., 2012; C. W. Stephan et al., 2004). A possible explanation for these inconclusive findings is that the effects of multicultural education are teacher-specific as it is the individual teacher who is responsible for the implementation of multiculturalism (C. W. Stephan et al., 2004; Wubbels et al., 2006).

Previous research has found individual variation in teachers' cultural diversity beliefs (Byrd, 2014; Hachfeld et al., 2015) and shown that students' perceptions of multicultural teaching vary significantly from teacher to teacher (McAllister & Irvine, 2000; Vervaet et al., 2018; Zinga & Gordon, 2016). Moreover, research has found that students often have more positive outgroup attitudes and more outgroup friendships when they perceive their teachers to express positive norms about diversity (see Verkuyten & Thijs, 2013). However, this line of research has primarily focused on the (perceived) instructional content of diversity teaching (Byrd, 2014; Hachfeld et al., 2015; Rattan & Ambady, 2013; Richeson & Nussbaum, 2004), and although there is excellent qualitative research on teachers' "dealings with diversity" (e.g., Gillborn, 1990)

quantitative studies have neglected the interpersonal dimension of teaching diversity, i.e. the interpersonal interactions between teachers and students with different cultural backgrounds.

This dimension of diversity teaching has also received relatively little attention in the development of multicultural school programs. Various authors (e.g. Banks & Banks, 1995; Gay & Howard, 2000) have mentioned that multicultural education is predominantly conceptualized and studied in terms of the explicit curriculum, even though, in order to be successful, multicultural education should also entail pedagogical practices that enact its message. Instructing students about diversity and positive interethnic relations requires teachers to 'teach by example', by engaging in positive intergroup interactions in their classroom themselves. Students' interethnic attitudes are probably not only influenced by the diversity norms teachers communicate in their teachings, but also by the behavioral examples they set through their relationships with students from diverse ethnic backgrounds. However, to the best of our knowledge, this proposition has not been systematically addressed in quantitative research.

The present study sought to make an original contribution to the literature by simultaneously examining the effects of perceived normative and relational multicultural teaching practices on children's ethnic outgroup attitudes. We focused on ethnic minority and ethnic majority students (Grades 4-6) from different classrooms in different parts of the Netherlands. These students typically have one or two teachers for the whole year, and they are in late childhood (9-13 years) which is an important period for the development of ethnic attitudes. In late childhood, children acquire more flexible ways of thinking about ethnic group boundaries, and thus develop a more complex understanding of ethnic groups (Aboud, 1988). Moreover, research has shown that outgroup attitudes become increasingly context-dependent after middle childhood (see Raabe & Beelmann (2011) for a meta-analyses), and according to Social Identity Development Theory (SIDT; Nesdale, 2004) social norms play a crucial role in this regard.

5.2 Theory

Teacher Norms in Multicultural Education

Forms of multicultural education (particularly in the European context, though less so in the US) often consists of curricula and instructional practices aimed at promoting positive views regarding cultural diversity and intergroup relations (McAllister & Irvine, 2000; Verkuyten & Thijs, 2013; Vervaet et al., 2018). These instructional practices seek to inform students about cultural differences and also have a strong normative component as they convey what 'ought to be done' when it comes to dealing with cultural 'others' (see Cialdini, Reno, & Kallgren, 1990). More specifically, multicultural education teaches that discrimination is morally unacceptable and that people from different cultures should be treated with respect (Verkuyten & Thijs, 2013). Teachers can be particularly powerful in prescribing these social norms to students, as they are important authority figures for children (Dunbar & Taylor, 1982; A. M. Ryan & Patrick, 2001).

For assessing the normative impact of teachers on students' attitudes it is reasonable to rely on children's subjective perceptions, as social norms can be assumed to exert their influence through children's awareness and understanding of them (see e.g., Tropp et al., 2016). Previous studies have shown that preadolescents' perceptions of their teachers' multicultural norms are associated with positive, privately reported ethnic outgroup attitudes (for a review, see Verkuyten & Thijs, 2013). These studies are consistent with SIDT's claim that group attitudes are dependent on the normative context (Nesdale, 2004) and indicate a process of social influence whereby individuals internalize the messages of important others because they are convinced by them (Kelman, 1958; Turner & Reynolds, 2001). Based on these findings and theoretical notions it can be expected that students' outgroup attitudes are more positive if they perceive their teacher to express positive norms about cultural diversity.

However, the effect of perceived teacher norms may also depend on students' ethnic background. On the one hand, it could be argued that these norms are particularly important for ethnic minority students. When teachers prescribe positive multicultural norms, this could make minority students feel supported by their ethnic majority teacher and this may make them more positive about the ethnic majority outgroup in general. This support may also be needed

among these ethnic minority students in particular, because ethnic minority children experience more ethnic derogation (Verkuyten & Thijs, 2002).

On the other hand, based on a social identity approach on normative influence, it has been argued that people are more likely to become convinced and thus influenced by norms if these norms are displayed by ingroup rather than outgroup members (Smith & Louis, 2008; Terry & Hogg, 1996). And, empirical studies have, indeed, shown that attitudes and behavior of people are more strongly influenced by social norms expressed by ingroup members than outgroup members (Jetten, Spears, & Manstead, 1996; Smith & Louis, 2008; Wilder, 1990). Given that ethnic majority teachers are outgroup members for ethnic minority students, we may expect norms expressed by these outgroup teachers to be less influential. Contrary, ethnic majority teachers are ingroup members for majority students and as such, the teacher norms may be more influential for these students. Such differential effects of group norms have already been shown with regards to the effect of peer group norms, which have been found to have a stronger effect on the willingness to interact with ethnic outgroups for majority students than ethnic minority students (Tropp et al., 2016). We could, therefore, also expect teacher norms to be less effective on the outgroup attitudes of minority student than ethnic majority students.

Teacher-Classmate Relationships in Multicultural Classrooms

Although research on multicultural education has examined how teachers promote positive norms about ethnic diversity, less is known about how they enact these norms in their pedagogical practices and interpersonal relationships with students from different ethnicities (Banks & Banks, 1995; Banks et al., 2015). According to social referencing theory (Feinman, 1982; Walden & Ogan, 1988) children gauge the behavior of important others in search for cues on how to behave in social situations, and a growing body of literature suggests that students turn to their teacher for this (J. N. Hughes et al., 2015). Specifically, it has been shown that students use their observations of the interactions between teachers and classmates for evaluating the latter, and that children's like or dislike of their classmates partly depends of the perceived quality of those interactions (Hendrickx, Mainhard, Boor-Klip, et al., 2017; J. N. Hughes et al., 2001, 2014, 2006).

These social referencing processes have special relevance in ethnically diverse classrooms and may not only affect the evaluation of particular peers but also the evaluation of the ethnic

groups these peers belong to. A common assumption in studies on intergroup relations is that attitudes toward specific outgroup members tend to generalize to the outgroup as a whole (Brown & Hewstone, 2005) and research has supported this attitude generalization in school-aged children (Stark et al., 2013). Hence, it can be anticipated that students' perceptions of favorable interactions between teachers and ethnic outgroup classmates increases their liking for those peers and generate a more positive stance toward the ethnic outgroup in general. This process should hold for ethnic majority and minority students alike: Ethnic minority children who perceive positive interactions between their teachers and majority classmates may develop more positive attitudes about the majority outgroup, and ethnic majority children who perceive such interactions between their teacher and minority classmates may become more positive about minority outgroups. Unfortunately, some research indicates that teachers appear to experience less favorable relationships with students from some ethnic minority groups (e.g., African-American, or Moroccan-Dutch) compared to students from ethnic majority groups (e.g., Spilt, Hughes, Wu, & Kwok, 2012; Thijs, Westhof, & Koomen, 2012). As such, students' perceptions of these relationships may not always be positive, and this may negatively affect majority children's evaluation of ethnic minority outgroups.

In addition to social referencing theory (Feinman, 1982; Walden & Ogan, 1988), extended contact theory (Wright et al., 1997) can be used to understand the potential impact of teacher-classmate relations on children's ethnic attitudes. This theory argues that the mere knowledge that ingroup members have positive interactions with outgroup others increases one's positivity towards the outgroup. There is empirical support for this expectation in research among children (Feddes et al., 2009; R. N. Turner et al., 2007; Vezzali, Giovannini, & Capozza, 2012). In the Dutch context, as in many other Western countries, most teachers have an ethnic majority background (e.g., Thijs et al., 2012) and this makes them ethnic ingroup members for their majority students. Thus, children may regard the interactions between their majority (ingroup) teachers and minority (outgroup) classmates as forms of extended intergroup contact and just as would be predicted by social referencing theory, the perceptions of these interactions could increase their outgroup positivity. However, for ethnic minority students, extended contact theory suggests an additional, complementary possibility. Research has shown that majority teachers are important contact figures for these children (Thijs & Verkuyten, 2012), which means that the perception of positive interactions between their majority teachers (outgroup) and their co-ethnic minority students (ingroup) could have positive effects on their

evaluation of the majority outgroup. Given the ethnic majority background of the participating teachers (all the teachers in the present study were native Dutch), we therefore expected ethnic minority children to have more positive outgroup evaluations if they perceive their teacher to have more positive relations with their co-ethnic minority classmates.

In short, we hypothesized that, for both ethnic majority and ethnic minority students, the number of perceived positive relations between children's teacher and their minority classmates positively predicts their ethnic outgroup evaluations. Additionally, we anticipated that perceiving positive interactions between teachers and majority students positively affect outgroup evaluations of ethnic minority students.

Alignment of Teacher Norms and Teacher-Classmate Relationships

According to Banks and Banks (1995), multicultural education should consist of various teaching practices to ensure that cultural responsiveness is engrained in all aspects of teaching. As such, teachers should not only address cultural diversity in their curricula but also in their pedagogical practices. The assumption is that multicultural education will be most effective when both content and practices communicate the same message about diversity. This implies that views and norms about cultural diversity as portrayed in the curriculum are most successfully conveyed to students when teachers' interpersonal behavior communicates the same message ('practice what they preach').

Although there are qualitative studies on how teachers may teach about- and simultaneously practice multiculturalism in their classrooms (Gillborn, 1990; Meetoo, 2018; Roux, 2001), we do not know of any quantitative studies that have researched the interactions between multicultural teacher norms and enactment of these teacher norms. However, there is a large body of literature that theorizes about social norms and how these norms are portrayed in corresponding behavior. Often these studies distinguish between subjective or injunctive norms, which prescribe what ought to be done, and descriptive norms, which refer to perceiving behavior that would be in line with a social norm (Chung & Rimal, 2016). Research has found that when injunctive norms are supported by descriptive norms, these norms are likely to have a bigger impact on attitude change and the willingness to change behavior (Smith & Louis, 2008; Staunton et al., 2014). Thus, when norms and the enactments of those norms correspond, their effects on attitudes are most pronounced. Studies among children have

shown similar patterns, where verbalizations of prosocial norms were found to be less effective in influencing sharing behavior when these norms were not accompanied by behavior that aligned with that norm. Inconsistencies in norms and behavior, thus, seem to weaken the effectiveness of normative messages (Rice & Grusec, 1975; Rushton, 1975). Such inconsistencies in norms are argued to contribute to a cognitive dissonance among the perceiver of these norms. And this dissonance may be resolved by concluding the inconsistency is socially acceptable, which makes it likely for people to not behave according to the group norm (Mckimmie et al., 2003).

In the case of multicultural teacher norms, which portray positive messages about cultural diversity, teacher behaviors that would be in line with these norms would have to be expressed. As such, students would need to see their teacher interact in a positive way with minority classmates. Thus, it can be expected that both minority and majority students who perceive positive multicultural teacher norms together with positive interactions with ethnic minority classmates are most likely to express positive outgroup attitudes. Additionally, norm inconsistency might occur when students perceive their majority teachers to express a strong norm in favor of multiculturalism but have mainly positive interactions with ethnic majority students. This is likely to weaken the effect of the teacher norm on students' outgroup attitudes.

Personal Relationships, Ethnic Composition, and Parental Norms

A proper evaluation of the impact of perceived teacher-classmate relations on children's ethnic attitudes requires that a number of alternative explanations are ruled out. First, research has shown considerable between-teacher variation in children's perceptions of their own relationships with their teachers (Koomen & Jellesma, 2015). This means that classmates can experience their teacher in the same way which implies the possibility of a confound between children's own experiences with their teacher and the teacher-peer relationships they observe in the classroom. Previous research has found that students who have positive relationships with their teacher tend to have more positive ethnic outgroup attitudes, because this relationship can involve the possibility of direct outgroup contact (in the case of an outgroup teacher; Thijs & Verkuyten, 2012), or provide students with the security and trust to approach outgroup others (Geerlings, Thijs, & Verkuyten, 2017; Miklikowska et al., 2019). To examine the effects of social referencing and extended contact, the impact of these direct experiences should be controlled for.

Investigations of the extended contact potential of perceived teacher-classmate relations should also control for the possibility of direct peer contact and parental norms. In ethnically mixed classrooms children have more opportunities for interethnic peer contact than in ethnically segregated ones. Although outgroup presence does not guarantee optimal intergroup contact (Stark et al., 2013), students in mixed classrooms tend to have more positive outgroup attitudes (for reviews, see Thijs & Verkuyten, 2013; Tropp & Prenovost, 2008). Moreover, despite a dearth of research on the ethnic norms of parents, research has supported their normative importance by demonstrating medium-sized parent-child similarity in outgroup attitudes (Degner & Dalege, 2013) and relations between children's outgroup relations and parents' acceptance of those (Munniksma, Flache, Verkuyten, & Veenstra, 2012). Thus, it is important to partial out the possible normative influence of parents on children's outgroup attitudes.

Present Study

The goal of the present study was to examine how children's perceptions of their teachers' normative and relational multicultural teaching were related to their ethnic outgroup attitudes. We studied a group Turkish-Dutch and Moroccan-Dutch (ethnic minority) and native Dutch (ethnic majority) students (aged 9-13 years) from ethnically diverse classrooms (Grades 4-6) in different parts of the Netherlands. Following previous research (see Verkuyten & Thijs, 2013), we asked them to report on the multicultural norms of their teacher (e.g., 'Does your teacher ever say it is wrong to discriminate?') and we used peer nominations to investigate students' perceptions of their teachers' relationships with minority and majority classmates. These relationship perceptions were included simultaneously to examine the behavioral aspects of how teachers themselves are seen to deal with diversity ('teaching by example'). Previous research typically assessed children's attitudes and norm perceptions at a single time point, which means that reversed causality cannot be ruled out (Verkuyten & Thijs, 2013). Specifically, it is possible that children project their own ethnic attitudes on their teacher and perceive stronger teacher norms against prejudice, for example if they have more positive attitudes themselves (see Thijs & Verkuyten, 2016). For this reason, we used a longitudinal design in which we predicted children's outgroup attitudes from the perceived teacher practices some 4.5 months earlier while controlling for their earlier outgroup attitudes.

Five hypotheses were evaluated. Our first hypothesis (H1) was that when students perceived positive multicultural teacher norms, they would evaluate outgroups more positively over time, and we explored whether this relation was different for ethnic minority versus ethnic majority children. Next, we hypothesized that the number of perceived positive relations between children's teacher and their minority classmates would positively predict their ethnic outgroup evaluations, for both ethnic majority and ethnic minority students alike (H2). Additionally, we anticipated that minority students who perceived positive relations between teachers and majority classmates would report stronger outgroup positivity over time (H3). Fourth, we expected that when majority and minority students perceived positive multicultural teacher norms together with positive interactions with ethnic minority classmates, they would be more likely to express positive outgroup attitudes (H4), because in that case teachers are seen to 'practice what they preach.' Finally, we tested whether the anticipated positive effect of the number of perceived positive relations between the teacher and ethnic majority classmates on the outgroup attitudes on minority students is weaker when teachers display strong multicultural norms, as such relations can be perceived to deviate from the prescribed norm (H5). In examining these hypotheses, we controlled for children's personal relationship with their teacher, ethnic classroom composition, and perceived parental multicultural norms.

5.3 Method

Participants

The current study focused on students in grades 4, 5, and 6 of primary school in the Netherlands. Our selection procedure was aimed at oversampling non-native Dutch students in order to be able to compare ethnic majority and minority groups. We, therefore, selected schools with a student population consisting of at least 10 percent minority students. In total 489 schools where contacted by email and phone, of which 18 participated in the study. This amounts to a low response rate (4%) which, unfortunately, is not uncommon for research in Dutch primary schools (M. Zee, Koomen, et al., 2016). Within these 18 schools, 44 out of 81 4th to 6th grade teachers participated in the study. Non-participation was almost exclusively explained in terms of already strenuous workloads and/or engagement in other research projects.

Originally, 888 students participated in our study. However, the final group of participants consisted of 315 children (minority background, 50.3 percent female, M_{age} = 10.51 SD = 1.02, range 9-13 years). The reason for this sample reduction was four-fold. First, we selected classrooms with both majority and minority students to ensure that we considered only those students who had the possibility of perceiving interactions between their teacher and ethnic ingroup and ethnic outgroup classmates. As such, two classrooms without students with a Dutch origin were excluded (39 students) as well as two classrooms with only students with a Dutch ethnic background (excluding 47 students). Second, because our measure of outgroup attitudes focused on native Dutch, Turks and Moroccans (the two largest migrant groups in the Netherlands), we further limited our sample to include only native Dutch (majority) students and students with a Turkish or Moroccan background, excluding 233 students with other ethnic origins. This makes it possible to conduct systematic analyses on the effects of perceived norms and teacher-classmate relations on outgroup attitudes. Third, students were only included if they had completed the survey at both waves of the study (59 students only participated in wave 1 or wave 2).

Finally, we applied listwise deletion of cases with missing values. Missing values were limited on most variables (n = 1-12), except for the measures for teacher-classmate relationships (n = 47) (between 0.3 and 12.5 percent missing values). The pattern of missing values was not found to be completely random (Little's MCAR test, χ^2 = 96.243, p = .030). Additional t-tests revealed that the excluded students did not differ significantly from the included students for age, gender, outgroup attitudes, or their perception of teacher norms and teacher-classmate relationships. However, they reported slightly less closeness with their teacher ($\perp M$ = -0.27, p = .035), and more often had a minority background ($\perp M$ = -0.23, p = .001). The 315 selected children resided in 29 classrooms (located in 15 schools) where, on average, 29.7 percent of the students was of Turkish or Moroccan origin. Four of the classrooms were taught by two teachers, and students in these classrooms answered the teacher-related survey questions for one randomly selected teacher.

Measures

Dependent variable

Children's *outgroup attitudes* (Time 1 and Time 2) were assessed using a Likert-type response format consisting of seven faces, ranging from very happy (0; big smile) to very sad (6; big frown), with a neutral mid-point (3; straight face). This "seven faces" response format (Yee & Brown, 1992) has been successfully used in previous studies among early adolescents from different ethnic groups (Sierksma et al., 2014b; Thijs & Verkuyten, 2012). A recent study supported its concurrent validity by demonstrating a strong relation with group stereotypes (Geerlings et al., 2017). The scale was recoded so that a higher score indicates a more positive attitude. Students were asked to indicate how they feel towards Dutch, Turkish and Moroccan people. For students of Turkish and Moroccan descent, outgroup attitude represents the attitude expressed towards Dutch people. For native Dutch students, outgroup attitude consists of the attitudes towards Turkish and Moroccan people. These two attitudes were highly correlated (Time 1; $r = .78$, Time 2; $r = .71$) and therefore average scores were used at each time point.

Explanatory variables

Perceived teacher norm. Students' perception of multicultural norms was assessed by asking them how frequently their teacher expresses normative views on cultural diversity. The measure consisted of three items which have been successfully used in previous studies in the Netherlands (Thijs & Verkuyten, 2013): "Does your teacher ever say that all cultures should be respected?", "Does your teacher ever say that it is wrong to discriminate?", and "Does your teacher ever say that people from all cultures are equal?" These items, measured on 5-point Likert type scales ranging from 0 (*absolutely never!)* to 4 (*very often!),* loaded on a single factor (factor loading between .70 and .61). Given the hierarchical nature of the data, for the estimation of reliability we used omega's instead of Cronbach's alpha's (see Geldhof, Preacher, & Zyphur, 2014). This scale was estimated to be reliable at both the student and the teacher level (ω within = .70, ω between = .96). Previous research has supported the validity of this measure by showing that students in the same classroom agree on the norms of their teacher (Thijs & Verkuyten, 2012), that teachers who are seen to express those norms tend to have better relationships with ethnic minority students (Thijs et al., 2012) and that minority students

who perceive such norms from their teacher have more positive self-feelings in classrooms where they are a numerical minority (Gharaei, Thijs, & Verkuyten, 2019).

Perceived teacher-classmate relationships. Research on social referencing in classroom settings has used peer nominations to assess the relationships between teachers and classmates (Boor-Klip, Segers, Hendrickx, & Cillessen, 2017; Hendrickx, Mainhard, Boor-Klip, et al., 2017). In line with these studies, we asked students to name classmates who "get along with the teacher well". This was an open-ended question, and the number of possible nominations was limited to ten classmates (a few students mentioned more than ten, in which case only the first ten students were recorded). On average students mentioned between two and four classmates. Our calculation is based on a measure of ethnic social standing developed by Bellmore, Nishina, Witkow, Graham and Juvonen (2007) that divides the number of received nominations from students of the same and other ethnic groups by the total number of students with that same or other ethnic background in the classroom. Our focus is not on received nominations for assessing the social standing of individual students but rather on students' perceptions of the social standing of different ethnic groups in their relationships with the teacher. Therefore, we used a similar calculation but focused on nominations instead of received nominations. For this, the identification numbers of students were matched to the ethnic background of each nominated classmate. For each respondent, we then counted the number of nominations per ethnic origin (Dutch, Turkish and Moroccan), and the total number of classmates by ethnic background within each classroom (the respondent themselves not included). Subsequently, the proportion of majority group nominations was operationalized as follows:

$$\frac{N\ Nominated\ students\ with\ Dutch\ background}{N\ Classmates\ with\ Dutch\ background}$$

This means, for example, that students who nominated 5 out of 20 native Dutch classmates receive a score of .40 on this variable. The minority group nomination variable was calculated differently for the three respondent groups. For native Dutch respondents we computed the relative number of nominated classmates with a Turkish or Moroccan background using the following formula:

$$\frac{N\ Nominated\ students\ with\ Turkish\ or\ Moroccan\ background}{N\ Classmates\ with\ Turkish\ or\ Moroccan\ background}$$

And for respondents with a Turkish or Moroccan background the minority group variable was composed of nominations of students from their own (either Turkish or Moroccan) ethnic background:

$$\frac{N\ Nominated\ students\ with\ same\ ethnic\ background}{N\ Classmates\ with\ with\ same\ ethnic\ background}$$

It is important to note that the two parts upon which these measures of perceived teacher relationships are constructed, namely 1) the number of nominations per group, divided by 2) the number of classmates of that same group, are both in part determined by additional factors that are not accounted for in this measurement. More specifically, part one of the equation does not consider that students varied in the number of classmates they nominated. Nominating more classmates for positive teacher interactions may not only be a product of a student's actual perception of teacher relationships but may also reflect student's sociability. We therefore performed additional analyses in which we included a variable indicating the *number of nominations* and used this variable in interaction with the measures for perceived teacher-classmate relationships to test whether the effect of the perceptions depends on students' willingness to nominate classmates.

Additionally, the nominator in the equation (the number of classmates of the particular ethnic groups) does not take into account the fact that the size of the classrooms within our sample varied between 9 and 32 students. Yet, the possibility of nominating many or all classmates of a particular ethnic group is much greater in smaller classrooms. As a result, students in smaller classrooms are more likely to generate higher scores on the measures for teacher-classmate relationships. We, therefore, performed additional analyses in which we included c*lassroom size* (number of students in the classroom) and tested whether the effects of perceived teacher-classmate relationships exist independently of the size of the classroom.

Some students (n = 63) answered the nomination question with the statement 'everyone'. Taken literally, this statement would indicate that these students mentioned all students of all ethnic backgrounds, warranting a score of one (meaning 100 percent on nominations of students of all ethnic backgrounds). However, the number of nominations was limited to 10, and as such, these students would not have been able to nominate all students in their class. We, therefore, interpreted the response 'everyone' as a nomination of 10 students (the maximum number) whose ethnicity is proportionate to the ethnic composition of the

classroom. Thus, students answering 'everyone' in a classroom with, for instance, 45 percent Dutch majority students and 32 percent Turkish minority students, are assumed to have nominated 4.5 Dutch and 3.2 Turkish students within their 10 possible nominations. Like the students who did nominate individual students, this number of nominations per ethnic group was then divided by the total number of students of the same ethnic background in the classroom.[21]

Minority versus majority status. Student ethnicity was coded using information on both country of birth of the student's parents as indicated by the students, and ethnic self-identification. The open-ended self-identification question (C. S. Brown, Spatzier, & Tobin, 2010), was preceded by a short text explaining the concept of ethnic groups and then asking students to indicate which group they feel they belong to. Students were coded to be of native Dutch origin (code 0) if both their parents were born in the Netherlands and, additionally, identified themselves as Dutch. Students were labeled as being of an ethnic minority (Turkish or Moroccan) origin (coded 1) when at least one parent was born in Turkey or Morocco and/or the student self-identified as Turkish or Moroccan (such as Moroccan or Moroccan-Dutch). If students only answered one of the questions, this answer was used to indicate their ethnic background.

Control variables

Student-teacher relationship. The quality of the student-teacher relationship was assessed with the Closeness subscale from the Student Perception of Relationship with Teacher Scale (SPRTS; Koomen & Jellesma, 2015).This scale consists of 6 items (e.g. 'I feel at ease with my teacher', 'If I have a problem, I can talk to my teacher about it') and Koomen and Jellesma (2015) provided support for its validity by showing that it is positively related to teachers' perceptions of relational closeness. Responses were measured on 5-point Likert scales ranging from 0 (*No, absolutely not!)* to 4 (*Yes, absolutely!).* Confirmatory factor analysis revealed that all items formed a

[21] Additional analyses were conducted to assess if our results differed when the answer 'everyone' was regarded as a missing value. These analyses yielded very similar results for all of our models. All the effects were in the same direction and were mostly found to be similarly significant. The two-way interaction between teacher norms and teacher-majority classmate relationships was marginally significant and in the same direction (b = 0.100, 95% *CI* [-0.142, 0.220]). However, the three-way interaction effect between student ethnicity, teacher-minority classmate relationships and teacher norms was in the same direction but not significant (b = 0.039, 95% *CI* [-0.142, 0.220]). In this analysis there also was a significant interaction effect between teacher norms and student ethnicity (b = -0.215, 95% *CI* [-0.426 -0.003]) We decided to present the models with the students that answered 'everyone' included in the sample, as the smaller sample size resulting from leaving these students out (N = 252) would lead to the situation in which, in some cases, only one or two students would report on a teacher. This would make estimating multilevel models more difficult and may lead to spurious estimation of standard errors.

single factor that had a good model fit (χ^2 (18) = 25.091, p = .12, RMSEA= .035, CFI = .986, $SRMR_{within}$ = .035; $SRMR_{between}$ = .408; loadings between .57 and .71). Omega's indicated a reliable scale for both the student and the teacher level (ω within = .80, ω between = .94).

Parental norms. Students' perceptions of their parents' multicultural norms were assessed using the same three items and response scales measuring the perception of teacher norms (e.g. "Do your parents ever say that it is wrong to discriminate?") These items were estimated to load on a single factor (factor loading between .76 and .91) and formed a reliable scale (ω within = .86).

Additional measures. We further controlled for the *number of nominations* a student reported on the peer nomination measure of teacher-classmate relationships, and we estimated the effects of student *gender* (0=male, 1=female) and *age* (measured in years). On the teacher/classroom level we controlled for *classroom size* (M = 22.15, SD = 4.95) and the *ethnic composition of the classroom* which was calculated as the percentage of students in each classroom who were identified as either Turkish or Moroccan (M = 32%, SD = 23). The latter variable was strongly and negatively related to the proportion of Dutch students (r = -.79).

Procedure

Data were collected in two waves: Between January and March of 2014 (halfway through the school year) and in June and July (at the end of the school year). Prior to data collection, participating teachers and students' parents were provided with detailed information about the goals and proceedings of the study, as well of the confidential treatment of the data. Parents were asked to notify the teacher if their child should not participate in the study. Passive consent was obtained from 96 percent of the parents and all participating teachers signed a written informed consent form at the start of the study. Pen-and-paper surveys were distributed by a research assistant in the presence of the teacher. The research assistant informed students on the purpose of the study and its confidentiality. Students were shown how to fill in the survey using an unrelated sample question, and assistants were available to answer clarification questions.

Data Analytic Strategy

As the data for the students (n = 315) were nested within teachers (n = 33) we used multilevel regression models in Mplus 7.3 for our analyses (Muthén & Muthén, 2012). All models were estimated using the MLR estimator; a maximum likelihood estimator that uses a numerical integration algorithm with standard errors that are robust to non-normality and non-independence of observations. All explanatory continuous variables were centered on their mean to enhance the interpretation of the findings. Two-sided significance tests were used for all effects.

After a set of preliminary analyses, we proceeded with our main analysis which consisted of four steps. In the first step (Model 1, Table 3), we analyzed the direct effects of perceived teacher norms (H1) and perceived relations between the teacher and minority classmates (H2), and between the teacher and majority classmates. In so doing, we controlled for perceived parental norms, children's personal relations with their teacher, and the ethnic composition of the classroom. In Model 2, we added interaction effects between the variables for perceived teacher-classmate relations and teacher norms to assess whether perceived relationships have a different effect on outgroup attitudes when the perceived relations between teachers and minority classmates match the teacher norm (H4). In the third step of our analysis (Model 3), two-way and three-way interactions were added to assess whether the effects of norms and relations are conditional on student ethnicity (H3 and H5). And finally, we estimated a model omitting non-significant three-way interaction terms (Model 4) to create a sparser model in which we investigated whether the direct effects of teacher norms and teacher-classmate relations (if they do not depend on each other) depend on the ethnic background of the student who perceives these norms and interactions (H3). Lastly, additional analyses were conducted to examine the role of *peer nomination frequency* and *class size* and to investigate the unique role teachers might play in affecting outgroup attitudes.

Table 5.1 *Descriptive statistics of student- and teacher level variables.*

Student level (N=315)	*Range*	*M*	*SD*
Female	0 – 1	.50	.50
Age	9 – 13	10.51	1.01
Close student-teacher relationship	0 – 4	2.77	.82
Perceived parental norm	0 – 4	2.51	1.12
Perceived teacher norm	0 – 4	2.37	1.03
Perceived teacher-peer relationship – majority group	0 – 1	.29	.25
Perceived teacher-peer relationship – minority group	0 – 1	.20	.24
Number of nominations	0 – 10	5.12	3.14
Outgroup attitudes at Time 1	0 – 6	4.25	1.80
Outgroup attitudes at Time 2	0 – 6	3.95	1.77
Teacher level (N=33)	*Range*	*M*	*SD*
Classroom size	9 – 32	22.15	4.95
Classroom ethnic composition	.03 – .87	.32	.23

5.4 Results

Preliminary Analyses

The mean scores for all study variables are shown in Table 5.1. The results of one sample t-test showed that overall mean scores were clearly above the neutral midpoint of the scale ($p < 0.001$). Regarding the perceived relationships between teacher and classmates, students on average nominated five classmates and they nominated around 29 percent of their ethnic majority classmates and 20 percent of their ethnic minority classmates as having a positive relationship with their teacher. For the student-level variables the correlations (Table 5.2) with student ethnicity indicate that the ethnic minority students in our sample were older compared to the Dutch majority students. In addition, minority students perceived more positive multicultural norms from their parents and teacher. Also, minority students reported more positive outgroup attitudes compared to majority students, but only at T1. The bivariate correlations, moreover, indicated that student perceptions of teacher and parental multicultural norms were strongly correlated, but unrelated to their perceptions of teacher-classmate relationships. Furthermore, closeness and the perceived teacher and parent norms were positively associated with outgroup attitudes. Finally, perceived relationships between teachers

and classmates was positively related to close student-teacher relationships, indicating the importance of taking this variable into account in our analyses.

Table 5.2 *Bivariate correlations between student level variables.*

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Ethnic minority background	-								
2. Female	-.099	-							
3. Age	.125*	.086	-						
4. Close student-teacher	-.108	.139*	-.050	-					
5. Perceived parental norm	.258***	-.028	.210**	.089	-				
6. Perceived teacher norm	.135*	.045	.249**	.184**	.601**	-			
7. Perc. tch-classmate rel. –	.035	.020	-.039	.120*	.053	.085	-		
8. Perc. tch-classmate rel. –	.033	.015	-.094	.167**	-.061	-.062	.384**	-	
9. Outgroup attitudes at Time 1	.205***	.074	.016	.206***	.220***	.246**	.082	.108	-
10. Outgroup attitudes at Time 2	.085	.083	-.052	.156**	.156**	.173**	.021	.052	.628***

Note. *$p < .05$, ** $p < .01$, *** $p < .001$ (two-sided).

Main Analyses

Perceived teacher norms and teacher-classmate relationships

Prior to testing our hypotheses, we calculated the intraclass correlation by estimating an intercept-only model. This revealed that 6.2 percent of the variance in the outgroup attitudes was at the teacher level. We continued the analyses by estimating multilevel regression models for outgroup attitudes (see Table 5.3). Model 1 shows that student background variables had no significant effect on outgroup attitudes when we controlled for outgroup attitudes at Time 1. The autoregressive effect of outgroup attitudes was large and positive ($B = 0.622$, 99% *CI* [0.501, 0.743]). The ethnic composition of the classroom was not found to affect students' outgroup attitudes ($B = -0.197$). More importantly, there was no direct effect of students' perceptions of teacher norms on students' outgroup attitudes ($B = 0.020$), and children's perceptions of their teacher's relations with both majority and minority classmates were unrelated to their outgroup attitudes as well (majority: $B = -0.036$; minority: $B = 0.002$).

Moderation effects

In the second step, we assessed if perceived teacher norms and teacher-classmate relationships interact in their effect on outgroup attitudes. In other words, we wanted to assess if perceived teacher norms are more meaningful for outgroup attitudes when they are accompanied by

corresponding teacher relationships. We added two interaction terms between teacher norms and teacher relationships with ethnic majority and minority classmates to the model. Model 2 shows a positive effect for the interaction between teacher norms and positive teacher relationships with majority classmates (B = 0.112, 95% *CI* [0.000, 0.223]). No interaction effect was found for minority teacher-classmate relationships.

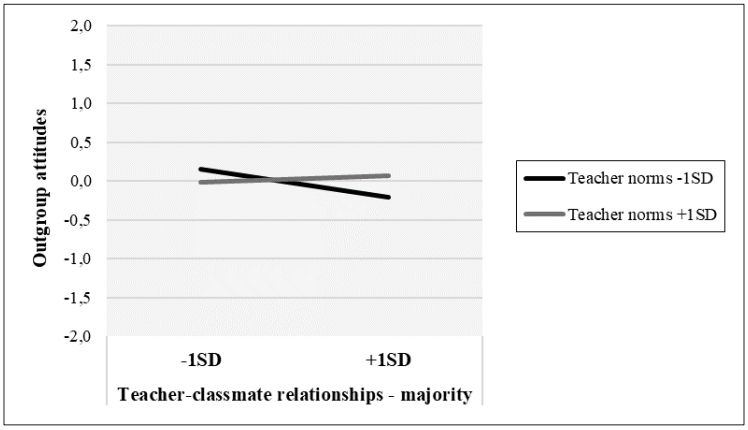
Table 5.3 *Standardized effects of perceived teacher norms, teacher-peer relationships, and controls on outgroup attitudes at Time 2.*

	Model 1	Model 2	Model 3	Model 4
Student level				
Background variables				
Minority (ref. majority)	-.046	-.064	-.057	-.053
Female (ref. male)	.078	.066	.093	.084
Age	-.071	-.065	-.075	-.078
Close student-teacher relationship	.016	.011	.014	.013
Perceived parental norms	.032	.031	.037	.034
Outgroup attitudes T1	.622***	.623***	.628***	.629***
Student perception				
Perceived teacher norm	.020	.030	.068	.074
Perc. teacher-classmate relations – majority group	-.036	-.071	-.100	-.101
Perc. teacher-classmate relations – minority group	.002	.029	-.031	-.030
Perc. tch. norm * Perc. tch- classm. rel. – majority group		.112*	.086	.117*
Perc. tch. norm * Perc. tch- classm. rel. – minority group		-.036	-.126~	-.142*
Perceived teacher norm * Minority			-.092	-.097
Perc. teacher-classm. rel. – majority group * Minority			.051	.062
Perc. teacher-classm. rel. – minority group * Minority			.080	.074
Perc. tch. norm * Perc. tch- classm. rel. – majority gr * Min.			.050	
Perc. tch. norm * Perc. tch- classm. rel. – minority gr * Min.			.164~	.187*
Teacher-level variables				
Classroom ethnic composition	-.025	-.037	-.035	-.034
Variance				
Level 1 (student)	.577***	.568***	.560***	.559***
Level 2 (teacher)	.015	.014	.011	.012
Total variance	.592	.572	.571	.571
(explained variance % compared to prev. model)		*(1.6%)*	*(2%)*	*(0%)*

Note. ~ p * p < .05, ** p < .01, *** p < .001 (two-sided)

The interaction effect is illustrated in Figure 1 and shows that when positive multicultural norms were less pronounced (i.e. below average student perception of teacher displaying positive norms about diversity), perceiving many positive interactions between the teacher and majority group classmates had a negative effect on outgroup attitudes (*B* = -0.183, 95% *CI* [-0.361, -0.004]). Conversely, when students perceived positive norms about multiculturalism, these relationships had a slight, but not significant, positive effect on their outgroup attitudes (*B* = 0.040, 95% *CI* [-0.049, 0.129]).

Figure 5.1 *Moderation effect of perceived relationships between teacher and majority classmates and teacher norms on outgroup attitudes.*

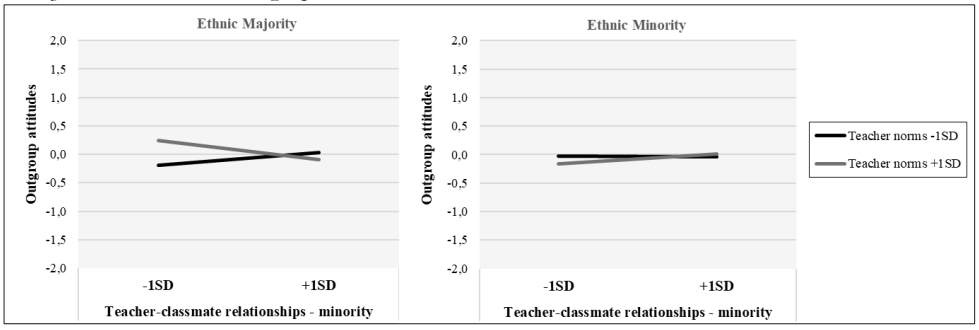


Subsequently, we assessed whether the aforementioned effects were similar for ethnic majority and minority students. The results in Model 3 revealed no significant three-way interaction with teacher-majority classmate relationships. However, there was a marginally significant three-way interaction between ethnicity, teacher norms and teacher relationships with minority classmates (*B* = 0.164, 95% *CI* [-0.021, 0.349]). This effect was only marginally significant, but, as it became significant in the following models, we further inspected it.

A final sparser model was estimated, excluding the non-significant effects of the three-way interaction with teacher-majority classmate relationships. This model (Model 4) also shows a significantly positive effect of the three-way interaction between students' ethnicity, teacher norms and perceived relationships between teachers and minority classmates (*B* = 0.187, 95% *CI* [0.024, 0.350]). Figure 2 illustrates this effect for minority and majority students separately.

For majority students, perceiving teachers interacting with minority classmates in a positive way had a positive effect on their outgroup attitudes when the perceived teacher norm was less prominent (below average) (B = 0.112, 90% *CI* [0.006, 0.218]). When teacher norms about multiculturalism were more prominent, the perceived relationships between teacher and minority students seemed to have a slight negative effect on outgroup attitudes (B = -0.171, 95% *CI* [-0.396, 0.026]). For minority students, however, perceiving positive interactions with minority classmates had little effect on their outgroup attitudes regardless of the teacher norms. Additionally, we did not find a significant interaction effect between students' ethnicity and the teacher's perceived relations with majority classmates (B = 0.062, 95% *CI* [-0.083, 0.206]). Overall, the final model explained an additional 3.6 percent of the variance in outgroup attitudes compared to the first model (with main effects only).

Figure 5.2 *Three-way interaction effect of perceived relationships between teacher and minority classmates, student ethnicity, and teacher norms on outgroup attitudes.*



Additional Analyses

To assess the robustness of our findings, we performed two additional analyses. First, given that our measures of teacher-classmate relationships are based on dividing peer nominations per ethnic group by the size of this ethnic group in the classroom, their impact could depend on the number of nominations a student made or on the size of the classroom. Thus, we assessed to what extent the effects of perceived teacher relationships with minority and majority classmates were dependent on the number of nominations and on classroom size by adding two- three- and four-way interactions with the direct effects and interaction effects from our main analyses. This analysis (Table S5.1 in Appendices) showed that most of the interaction effects described were not dependent on class size or nomination frequency. However, we did find that the two-way interaction with teacher-classmate relationships and class size showed

that the effect minority relationships is stronger in larger classrooms (*B* = 0.095, 95% *CI* [0.018, 0.172]). Similarly, there was a significant interaction between the nomination frequency and teacher-majority classmate relationships (*B* = -0.195, 95% *CI* [-0.312, -0.077]), indicating that for children who nominated more classmates the effect of teacher-majority classmate relationships is weaker.[22]

Second, we explored possible interactions with parental norms and teacher-classmate relationships by adding the interactions with multicultural parental norms to the final model of our main analysis and testing another model in which we replaced the interactions for teacher norms with parental norms. These analyses (Table S5.2 in Appendices) showed that when both teacher norms and parental norms were included in the model the interaction and main effects of both variables were non-significant. The model in which parental norms replaced teacher norms showed similar effect sizes and directions for both direct and interaction effects. However, bivariate correlations between these norms and outgroup attitudes were found to be slightly stronger with teacher norms (parental norms: $r = 0.16$; teacher norms: $r = 0.17$).

5.5 Discussion

The aim of this study was to assess whether teachers affect their students' ethnic outgroup attitudes through the norms about multiculturalism that they express and the relationships they have with their students. Previous research has mainly focused on the norms teachers communicate through multicultural education and instructional practices (Byrd, 2014; Hachfeld et al., 2015; Rattan & Ambady, 2013; Richeson & Nussbaum, 2004). Research on the multicultural messages that teachers convey through their interpersonal interactions with ethnic

[22] The negative interaction between frequency of nomination and teacher-majority classmate relationships indicates that when students nominated many classmates as having a good relationship with their teacher, perceiving such positive teacher relationships with ingroup or outgroup classmates had less of an effect on outgroup attitudes. In contrast, when students nominated few classmates, perceiving these relations had a stronger positive effect on outgroup attitudes. This could mean that perceiving positive ingroup interactions plays a bigger role for students who are less sociable. To test this assumption, we examined whether a similar interaction effect exist with the measure for close student-teacher relationship as this measure also captures some of the tendency for positive social relations. Indeed, this analysis showed a similar negative, though not significant, interaction effect with the teacher-classmate relationships (*B* = -.024, *95% CI* = -.143, .094). This indicates that the negative interaction with nomination frequency was probably not related to sociability. Rather, with a larger number of nominations individual perceptions may become less discernable and may thus be less impactful on students' outgroup attitudes.

outgroup students has been lacking. We used peer nominations of relationships between teachers and ethnic majority and minority classmates and tested their unique predictive role for students' outgroup attitudes, alongside prescriptive teacher norms. Moreover, because our data contained two time-points we could assess the effects of perceived teacher norms and teacher-classmate relationships on students' outgroup attitudes while controlling for students' initial outgroup attitudes (at Time 1). Taking into account this autoregressive effect allowed us to examine change in outgroup attitudes over time and to investigate how this change was related to perceptions of teacher norms and behavior.

Based on the notion that preadolescent children's ethnic attitudes are dependent on the social norms in their environment (see Nesdale, 2004), our first expectation (H1) was that students' perceptions of the multicultural norms of their teacher would increase their outgroup positivity over time. This hypothesis was not supported in our analyses. We did find positive correlations between perceived teacher norms at Time 1 and outgroup attitudes at Time 1 and Time 2, but there was no significant over-time effect in our main analyses. This lack of effect may be attributed to the strong autoregressive effect of outgroup attitudes (indicating relative stability of outgroup attitudes during the second half of the school year) and suggests the possibility of reverse relations between perceived teacher norms and ethnic attitudes in earlier cross-sectional research (see Thijs & Verkuyten, 2016). Still, we did find that the perceived multicultural norms moderated the impact of the perceived teacher-classmate relations over time.

We expected that for both ethnic majority and minority students, perceiving positive interactions between their teacher and minority classmates would positively affect their outgroup attitudes (H2). This main effect was not obtained but it was found to depend on a combination of student ethnicity and perceptions of teacher norms. For ethnic minority students, there was no significant effect of perceived teacher-minority classmate relationships. This might contradict the premise that interactions between ingroup (minority) classmates and their native Dutch teacher constitute a form of extended contact for ethnic minority students (see Cameron, Rutland, Hossain, & Petley, 2011; Pettigrew & Tropp, 2006; R. N. Turner et al., 2007; Vezzali et al., 2012). However, it is in line with previous work that has found no extended contact effects on outgroup attitudes among minority students (Feddes et al., 2009) and with studies that have shown that the effect of intergroup contact (either direct or

extended/indirect) on outgroup attitudes tends to be weaker among ethnic minority groups (Aboud, Mendelson, & Purdy, 2003; Tropp & Pettigrew, 2005).

For Dutch majority students, perceiving positive relationships between their teacher and minority classmates had a positive effect on their outgroup attitudes, but only when multicultural teacher norms were less pronounced. These results suggest that when teacher norms are less prominently displayed, ethnic majority students rely more on the social cues derived from teacher-classmate relationships to form an ethnic outgroup attitude. The ensuing positive effect from those social cues might be the result of processes of social referencing where children tend to like classmates with whom their teacher has a good relationship (Hendrickx, Mainhard, Boor-Klip, et al., 2017). Furthermore, because the relationship involves an ethnic ingroup teacher and an outgroup classmate the effect may also be the result of extended contact processes (Pettigrew & Tropp, 2006). The interaction further implies that when teacher multicultural norms were perceived to be more favorable, the perceived relationships between teacher and minority classmates had a negative effect on majority student's outgroup attitudes. This finding is not in line with our expectation that it would be particularly effective to perceive positive interactions between teachers and minority classmates that correspond with positive teacher norms (H4). If anything, it appears that positive relationships between teachers and minority students compensate for the relative absence of teachers' multicultural norms. Alternatively, when multicultural teacher norms are strongly positive and accompanied by positive relationships with minority students, this may invoke a feeling of exclusion among majority students. Indeed, research has found that multiculturalism can be perceived as focusing on ethnic minority groups and thereby as excluding ethnic majority members (Correll et al., 2008; Plaut et al., 2011; Rattan & Ambady, 2013). Perhaps, reinforcing these multicultural norms by focusing on relationships with ethnic minority students accentuates these feelings of exclusion and thus undermines the positive effects of perceiving such relationships.

With regard to relationships between teachers and *majority* classmates, we hypothesized, based on social referencing theory (Walden & Ogan, 1988), that for ethnic minority students, these relationships would have a positive effect on their evaluations of the majority group (H3). However, we also argued that these relationships may have negative effects among ethnic minority students as these relations could be construed to negate positive teacher norms about

multiculturalism, and students may, therefore, conclude that their teachers are biased or favor the majority (ingroup) over minority groups (H5). Our findings show that perceiving teacher-majority classmate relationships can negatively affect outgroup attitudes and these relationships have a different effect on outgroup attitudes depending on teacher norms. More specifically, when teacher multicultural norms were perceived to be less pronounced, observing positive interactions between native Dutch teachers and native Dutch classmates had a negative effect on students' attitudes towards outgroups. Unlike our expectations however, these effects were found among ethnic majority and ethnic minority students alike. It is possible that the hypothesized processes affect students' outgroup attitudes, regardless of their ethnic background, as the lack of multicultural teacher norms creates a classroom environment in which positive interactions between a majority teacher and majority classmates can be interpreted as a form of majority ingroup preference (Dovidio et al., 1997; Nesdale et al., 2010). Students might understand these positive interactions between native Dutch students and teachers as a tendency of the teacher to favor Dutch students over ethnic minority students. Previous research has found that perceiving such intergroup biases tends to lead to a lower intention to engage in interethnic friendships (Tropp, O'Brien, & Migacheva, 2014). Indeed, our study shows that, under these conditions, ethnic majority students evaluate minority groups more negatively, and ethnic minorities, similarly, report more negative evaluations of majority groups.

Our findings also indicate, conversely, that when minority and also majority students observe their teacher expressing positive norms about multiculturalism, favorable interactions between majority classmates and teachers have a significant positive effect on outgroup evaluations. Likely, these multicultural teacher norms function as a buffer against the possibility of group biases. Teachers who frequently emphasize multicultural norms in their classrooms may reduce the likelihood of a majority group bias and, thus, allow students to make positive social inferences from relationship between the teacher and majority group classmates. This process would be in line with research on social referencing that indicates that students make inferences about likeability based on their teacher's interpersonal relationships with classmates (Hendrickx, Mainhard, Boor-Klip, et al., 2017; J. N. Hughes et al., 2001). However, given that the 'outgroup' constitutes a different group for ethnic majority and minority students, the mechanism of social referencing may work slightly differently for both groups. For ethnic minority students, teachers' positive interactions with majority classmates, combined with

multicultural norms, may simply signal to students that these majority students are likable. For ethnic majority students, on the other hand, these interactions with ingroup classmates might signal teacher's ingroup acceptance (i.e. 'the teacher likes people who are like me'). This would be in line with previous research that has found that majority students who share positive relationships with their majority teacher tend to evaluate outgroups more positively (Geerlings et al., 2017).

The results present a rather complex set of configurations between perceived teacher norms and perceived teacher-student relationships, which does not correspond to our initial assumption that teacher norms and practices would be most effective when they correspond. Nevertheless, it is important for teachers to consider both 'what they preach' and 'what they practice' as both norms and practices (in combination), can positively or negatively affect outgroup attitudes.

Limitations and Directions for Future Research

Our study has several limitations that should be taken into account in the interpretation of the findings. First, the sample size was somewhat limited. At the teacher level, the sample size may have restrained the variability in outgroup attitudes. In our sample students' outgroup attitudes varied between students rather than between teachers. Yet, other studies have also found that outgroup attitudes differ little between classrooms but rather between students (e.g., Thijs & Verkuyten, 2012). Furthermore, the number of students reporting on a single teacher is somewhat limited in certain classrooms due to the small class sizes. However, the smallest classroom in our sample contained eight students which is considered sufficient for generating reliable and representative results (Snijders & Bosker, 1999) and we used a Maximum likelihood estimator with robust standard errors (MLR: Muthén & Muthén, 2012). Nonetheless, a larger sample would have been preferable, also because that would enable us to investigate possible differences between the two minority groups (Turkish-Dutch and Moroccan-Dutch students).

A second limitation concerns the number of time points in the data. We used data from two waves, which allowed use to draw conclusions about the direction of effects (Meeus, 2016). Still, we cannot draw any causal inferences from these analyses, due to the possibility of time-varying third-variables (Hamaker et al., 2015). Concerning our sample, it is also important to

note that this study was conducted in elementary schools in the Netherlands where teachers usually teach a class of students for one full year. As such, teachers have the opportunity to become an important source of influence in students' lives, including via the norms they express and the relationships they form. However, this influence is likely to be less strong in high school settings where students usually are taught by many different teachers (but see Miklikowska et al., 2019). The effects of teacher norms and teacher-classmate relationships found in this study might thus be specific for elementary school.

Regarding the measure of perceived teacher-classmate relationships, our additional analyses indicated that its impact partly depended on the size of the classroom and nomination frequency. Specifically, the results showed that the effect of perceived majority relationships was less strong with a higher number of nominations, and that the effect of perceived teacher-minority classmate relationships was stronger in larger classrooms.[23] Nevertheless, we would argue that using this indirect measure of perceptions of teacher relationships with different ethnic groups is to be preferred over a more direct measure of such perceptions (e.g. asking students if their teacher has positive relationships with ethnic majority/minority classmates). A more direct measure might be prone to social desirability effects or experienced as delicate or divisive.

A final limitation of our study is that the students in our sample appear to have conflated teacher and parental norms. Both were assessed using the same set of three items and these questions were asked consecutively in our survey. Future studies would need to include measures that more clearly distinguish between perceived teacher and parental norms, to disentangle their unique effects on outgroup attitudes. They could also examine the change in (perceived) teacher norms over time, as teachers could adjust their multicultural teachings to their perceptions of the attitudes of their students.

Practical Implications

The results of our study provide some suggestions for teaching practices in culturally diverse classrooms. They show that the interpersonal relationships between teachers and students with

[23] The latter may be due to a strong negative correlation between classroom size and the percentage of ethnic minority students (r = -0.50). This implies a lower likelihood of nominating minority students in larger classes, which would make these nominations more noteworthy.

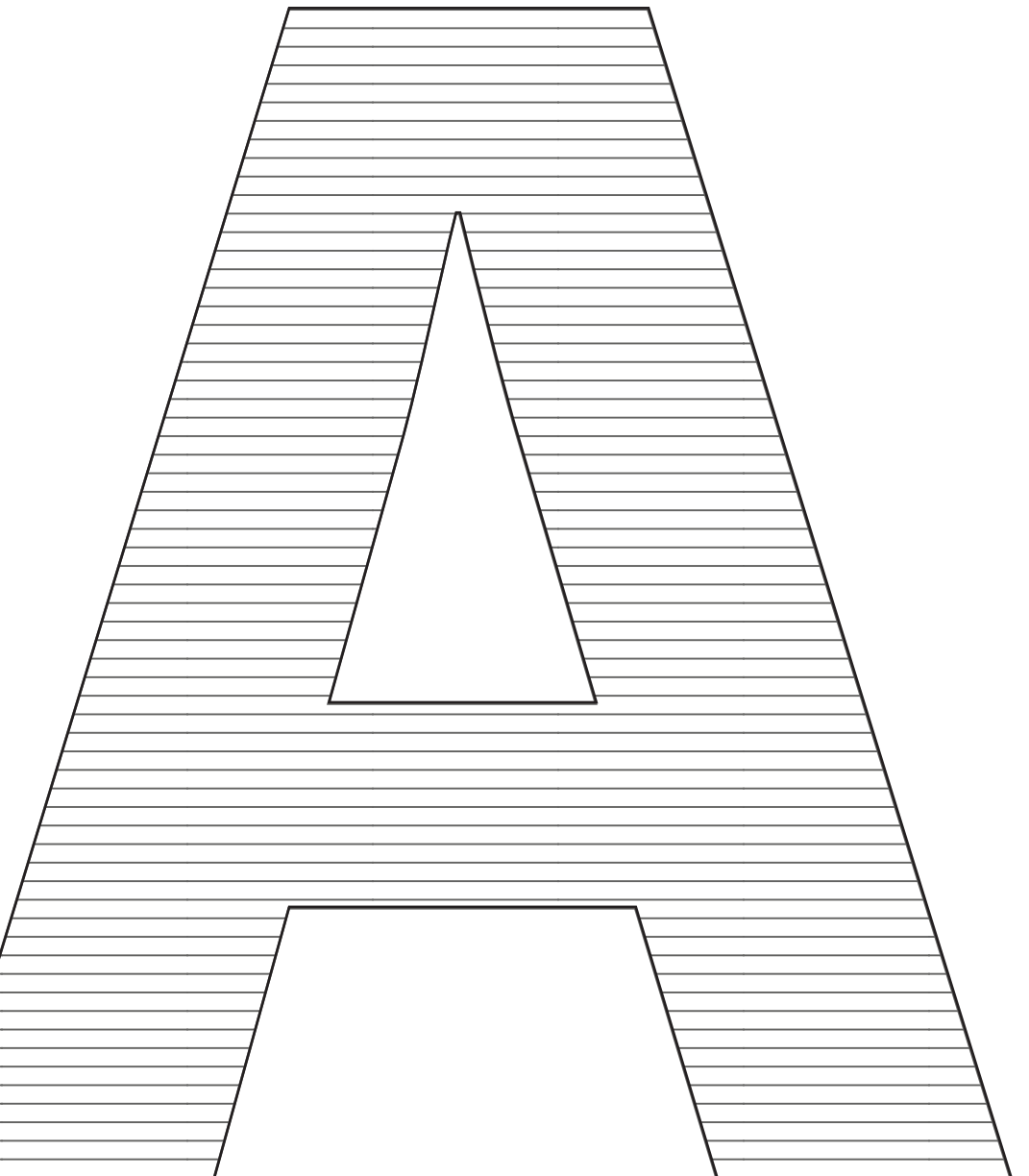
diverse backgrounds can signal messages about the acceptance of cultural diversity to students in that classroom. Apparently, these relationships are not only important for the promotion of a healthy school climate and children's sense of school belonging as has been found in the school psychology literature (e.g., Allen, Kern, Vella-Brodrick, Hattie, & Waters, 2016; Thijs, Keim, & Geerlings, 2018), but also for how children think about ethnic outgroups. Thus, it seems important for teachers to be aware of their interpersonal relationships with both majority and minority students. For ethnic majority students, positive interactions with majority classmates reaffirm that their ethnic majority teacher 'likes people who are like me' which generates more positive attitudes towards the minority group. For ethnic minority students, these relationships may convey positive social cues about dealing with majority outgroups, and, similarly, perceiving positive relationships between teachers and ethnic minority students may have positive effect on outgroup attitudes for ethnic majority students.

However, our study also shows that for these perceptions of teacher-classmate relationships to have a positive effect on outgroup attitudes, teacher norms may play an important role in forming a balanced environment for both minority and majority students. With regard to instructional practices in diversity education, our findings suggest that setting positive norms about cultural diversity can be important for students' outgroup attitudes. For ethnic minority students, expressing positive norms helps to create an environment that is accepting and supportive of cultural diversity. Such environments are likely to make ethnic minority students feel recognized and valued. This may have positive outcomes in itself but may also help to buffer against possible perceptions of group bias in the classroom. However, our results also suggest that multicultural norms might bolster feelings of exclusion among ethnic majority students. It is therefore important for teachers and schools to invest in curricula that promote positive intergroup relations and cultural diversity in a manner that is inclusive of both minority and majority group children.

Conclusion

Our study reveals that teachers in culturally diverse classrooms influence how their students evaluate ethnic outgroups, not only through the norms about multiculturalism they express, but also through the interpersonal relationships with their students. Both ethnic minority and majority students use the social cues that are conveyed in relationships between their teacher and classmates for evaluating ethnic outgroups. However, these social cues can be interpreted

differently depending on the multicultural classroom environment that teachers create. Among both majority and minority students, positive teacher-majority classmate interactions can generate more favorable outgroup attitudes, but only when accompanied with multicultural norms expressed in their classroom. For ethnic majority students, perceiving positive interactions between their teacher with minority classmates has positive effects on their outgroup attitudes. But these perceptions may lose their positive influence when combined with strong multicultural norms, as these norms might, perhaps, strengthen feelings of exclusion among majority students.



Appendices

Appendices

Table S3.1 *Factor loadings and intercepts of items for student-specific teacher self-efficacy*

	Loadings		Intercepts	
	majority	*minority*	*majority*	*minority*
Instructional strategies	.785	.815	5.178	4.918
	.846	.859	4.911	4.605
	.807	.857	4.867	4.599
	.643	.786	5.100	4.891
	.786	.794	5.267	4.952
	.841	.870	4.856	4.476
Student engagement	.824	.826	5.067	4.946
	.802	.779	5.022	4.728
	.826	.738	5.033	4.762
	.788	.856	5.044	4.728
	.841	.924	4.989	4.449
	.817	.853	4.789	4.218
	.651	.477	5.122	4.714
Behavior management	.710	.473	5.089	5.109
	.690	.469	5.100	5.204
	.707	.450	5.433	5.163
	.709	.407	5.256	5.190
	.682	.472	5.489	5.401
Emotional support	.709	.587	5.511	5.340
	.708	.600	5.478	5.272
	.673	.723	5.378	5.190
	.811	.700	5.044	4.959
	.504	.507	5.022	4.864
	.696	.801	4.911	4.585
	.816	.811	4.967	4.653

Table S5.1 *Three-way and four-way interactions with class size and number of nominations.*

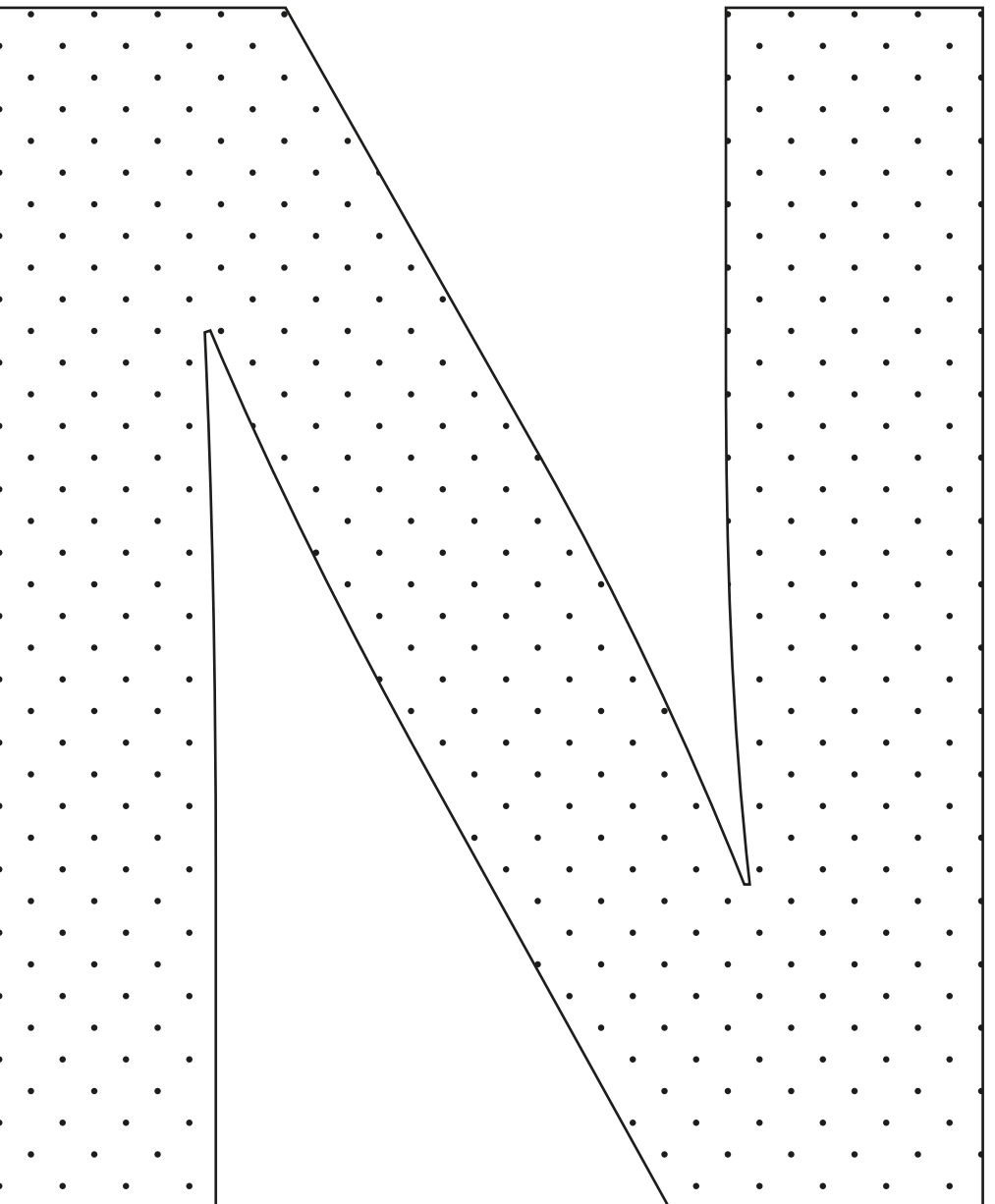
	Model 1
Student level	
Minority (ref. majority)	-.100
Perceived teacher norm	.130
Perc. teacher- classm. relations – majority group	-.129*
Perc. teacher- classm. relations – minority group	.166
Perceived teacher norm * Minority	-.190
Perc. teacher- classm. rel. – minority group * Minority	-.100
Perc. tch. norm * Perc. tch- classm. rel. – majority group	.043
Perc. tch. norm * Perc. tch- classm. rel. – minority group	-.018
Perc. tch. norm * Perc. tch- classm. rel. – minority gr * Minority	-.054
Nr of nominations	-.094
nr. Norm * Minority	.111
nr. Nom * Perceived teacher norm	-.058
nr. Nom * Perceived teacher- classm. rel. – majority group	-.195***
nr. Nom * Perceived teacher- classm. rel. – minority group	-.074
nr. Nom * Perceived teacher norm * Minority	-.188
nr. Nom * Perceived teacher- classm. rel. – minority gr. * Minority	.102
nr. Nom * Perc. tch. norm * Perc. tch- classm. rel. – majority group	.022
nr. Nom * Perc. tch. norm * Perc. tch- classm. rel. – minority group	-.118
nr. Nom * Perc. tch. norm * Perc. tch- classm. rel. – min. gr * Min.	-.139
Cross-level interactions	
Class size	.001
Cl. size * Minority	-.124
Cl. size * Perceived teacher norm	.057
Cl. size * Perceived teacher- classm. rel. – majority group	-.072
Cl. size * Perceived teacher- classm. rel. – minority group	.095**
Cl. size * Perceived teacher norm * Minority	-.067
Cl. size * Perceived teacher- classm. rel. – minority gr. * Minority	-.123
Cl. size * Perc. tch. norm * Perc. tch- classm. rel. – majority group	-.067
Cl. size * Perc. tch. norm * Perc. tch- classm. rel. – minority group	.062
Cl. size * Perc. tch. norm * Perc. tch- classm. rel. – min. gr * Min.	-.154
Variance	
Level 1 (student)	.466***
Level 2 (teacher)	.009
Total variance	.500

Note. Effects are controlled for age, gender, parental norms, student-teacher relationships, and outgroup attitudes at T1. * $p < .05$, ** $p < .01$, *** $p < .001$ (two-sided)

Table S5.2 *Two-way and three-way interactions with parental multicultural norms.*

	Model 1	Model 2
Student level		
Student perception		
Minority (ref. majority)	-.023	-.039
Perceived parental norm	.103	.086
Perceived teacher norm	.020	.049
Perc. teacher-classmate relations – majority group	-.060	-.076
Perc. teacher-classmate relations – minority group	.037	-.033
Perceived parental norm * Minority	-.134	-.108
Perceived teacher norm * Minority		-.028
Perc. teacher-classm. rel. – minority group * Minority	.072	.085
Perc. tch. norm * Perc. tch- classm. rel. – majority group		.086
Perc. tch. norm * Perc. tch- classm. rel. – minority group		-.065
Perc. tch. norm * Perc. tch- classm. rel. – minority gr * Min.		.103
Perc. par. norm * Perc. tch- classm. rel. – majority group	.117*	.073
Perc. par. norm * Perc. tch- classm. rel. – minority group	-.153**	-.118
Perc. par. norm * Perc. tch- classm. rel. – minority gr * Min.	.180*	.110
Variance		
Level 1 (student)	.557***	.552***
Level 2 (teacher)	.014	.013
Total variance	.571	.565

Note. Effects are controlled for age, gender, parental norms, student-teacher relationships, and outgroup attitudes at T1. * $p < .05$, ** $p < .01$, *** $p < .001$ (two-sided)



Nederlandse samenvatting

Nederlandse samenvatting

Veel samenlevingen zijn etnisch diverser geworden, en als gevolg daarvan zijn ook scholen steeds meer divers in samenstelling. Dit is ook het geval in Nederland, waar het percentage inwoners met een niet-etnisch Nederlandse achtergrond is gestegen tot 23 procent en naar verwachting zal toenemen tot 35 procent in 2060 (CBS, 2018c). Etnische diversiteit is daardoor een wijdverbreid kenmerk van veel Nederlandse scholen. Het werken met een etnisch diverse klas kan in veel opzichten een verrijking zijn voor leerkrachten; het bevordert vaak creativiteit met betrekking tot onderwijspraktijken en het stelt leerkrachten in staat leerlingen voor te bereiden op de diversiteit in de samenleving (e.g. Leung et al., 2008). Maar literatuur over etnische en culturele diversiteit in het onderwijs laat ook zien dat leerkrachten uitdagingen ervaren bij het werken met leerlingen met diverse achtergronden. Deze uitdagingen zijn vaak gecentreerd rond twee bredere thema's.

Ten eerste is er de uitdaging om *etnisch diverse leerlingen les te geven* op manieren die hun academische prestaties optimaliseren. Omdat minderhedenleerlingen uit de eerste en tweede generatie vaak minder goed presenteren in het onderwijs (e.g. Heath et al., 2008; Portes & MacLeod, 1999), is dit een belangrijk aandachtspunt van diversiteitsonderzoek op scholen. Leerkrachten wordt gevraagd om methoden en lespraktijken te ontwikkelen die minderhedenleerlingen in staat stellen om academisch en psychologisch in dezelfde mate te presteren en te groeien als hun klasgenoten met een etnische meerderheidsachtergrond. De tweede uitdaging voor leerkrachten bij het *omgaan met etnische diversiteit* op scholen draait om lesgeven over het onderwerp culturele en etnische diversiteit. Scholen worden vaak gezien als belangrijke contexten waarin leerlingen kunnen leren om op jonge leeftijd positieve contacten aan te gaan met mensen van verschillende achtergronden en op die manier leren leven in een diverse samenleving (e.g. Ülger, Dette-Hagenmeyer, Reichle, & Gaertner, 2018; Verkuyten & Thijs, 2013). Als zodanig staan leerkrachten voor de taak om onderwijspraktijken te ontwerpen en toe te passen die een positieve bijdrage leveren aan de attitudes en interacties tussen kinderen van verschillende achtergronden.

Voor beide uitdagingen kunnen interpersoonlijke, dyadische interacties tussen leerkrachten en leerlingen een belangrijke rol spelen. Met betrekking tot de eerste uitdaging om *effectief les te geven aan leerlingen uit etnische minderhedengroepen,* heeft onderzoek aangetoond dat affectieve dyadische relaties tussen leerling en leerkracht, d.w.z. relaties die worden gekenmerkt door emotionele steun, warmte en/of gebrek aan conflict, de academische ontwikkeling van kinderen bevorderen (Ly et al., 2012; Roorda et al., 2011, 2017; Wu et al., 2010). Hoewel uit dit eerder onderzoek is gebleken dat het belangrijk is om aandacht te geven aan interacties tussen leerlingen en leerkrachten op een dyadisch niveau, lag de grootste nadruk op emotionele steun van de leerkrachten. Maar er is minder aandacht besteed aan de manier waarop leerkrachten leerlingen van verschillende etnische groepen kunnen ondersteunen via andere aspecten van hun lesgeven, zoals instructie- en gedragsbeheerstrategieën. Een factor die in dit opzicht veelbelovende inzichten lijkt te bieden, is leerkracht self-efficacy. Dit concept verwijst naar de mate waarin leerkrachten geloven dat ze in staat zijn om adequate ondersteuning te bieden aan hun leerlingen om de beoogde resultaten te behalen (Guskey & Passaro, 1994). Onderzoek heeft uitgewezen dat leerkrachten die zich doeltreffend (self-efficacious) voelen, meer ondersteunende en effectievere onderwijspraktijken toepassen, en dat dit doorwerkt in betere academische prestaties van leerlingen (voor een overzicht zie M. Zee & Koomen, 2016). Uit recent onderzoek blijkt leerkracht self-efficacy ook dyadisch van aard te zijn, d.w.z. dat leerkrachten zich doeltreffender voelen in hun interacties met sommige leerlingen dan met andere (M. Zee et al., 2017; M. Zee, Koomen, et al., 2016). Een belangrijke vraag is of leerkrachten dergelijke verschillen ook ervaren in hun dyadische interacties met minderheden- versus meerderheidsleerlingen. Een *eerste doel* van dit proefschrift is daarom om de uitdaging van het lesgeven aan minderhedenleerlingen te adresseren door de dyadische relaties tussen etnische minderhedenleerlingen en hun etnische meerderheidsleerkrachten te onderzoeken en te testen hoe deze relaties verband houden met schoolse ontwikkeling. Hiervoor onderzoek ik niet alleen de affectieve aspecten van de relaties tussen leerkrachten met individuele leerlingen, maar ook de self-efficacy die leerkrachten ervaren binnen deze dyadische relaties.

Wat betreft de tweede uitdaging om *leerlingen over diversiteit te onderwijzen* op een manier die bijdraagt aan positieve relaties tussen groepen, is aangetoond dat leerkrachten een aanzienlijke invloed hebben op de houding van leerlingen. Uit onderzoek is gebleken dat wanneer leerkrachten zich in hun klas positief uiten over culturele diversiteit, leerlingen vaak positievere attitudes hebben over andere etnische groepen (voor overzicht zie Verkuyten & Thijs, 2013).

De nadruk van dergelijk onderzoek ligt meestal op de normen die leerkrachten stellen en de onderwijskundige inhoud van diversiteitsonderwijs (Byrd, 2014; Hachfeld et al., 2015; Rattan & Ambady, 2013; Richeson & Nussbaum, 2004). Daarbij gaat het dus vooral over wat leerkrachten expliciet communiceren over etnische diversiteit, terwijl er niet veel aandacht is voor de dyadische interpersoonlijke dimensie van lesgeven over diversiteit. Het *tweede doel* van dit proefschrift is daarom te onderzoeken hoe leerkracht-leerling relaties de houding van leerlingen over andere etnische groepen kunnen beïnvloeden. Dit is op twee manieren onderzocht. Ten eerste kunnen de dyadische relaties een directe invloed hebben met attitudes over andere groepen. Uit een eerdere studie bleek dat minderhedenleerlingen positievere opvattingen hebben over de etnische meerderheid wanneer ze een warme relatie ervaren met hun etnische meerderheidsleerkracht, wat wijst op een positief effect van intergroepscontact (Thijs & Verkuyten, 2012). In dit proefschrift onderzoek ik daarnaast of deze affectieve dyadische relaties met meerderheidsleerkrachten ook verband houden met de attitudes van etnische meerderheidsleerlingen over minderheden door de veilige haven die deze relaties bieden. Een tweede manier waarop affectieve relaties tussen leerlingen en leerkrachten de attitudes van leerlingen kunnen beïnvloeden, is niet door ervaring uit de eerste hand, maar door het observeren van positieve relaties tussen leerkrachten en klasgenoten in etnisch diverse klassen. Deze relaties tussen leerkracht en klasgenoot worden onderzocht als een vorm van 'het goede voorbeeld geven' waarbij leerkrachten indirect positieve waarden en normen over etnische diversiteit uitdrukken.

Dit proefschrift bevat vier empirische hoofdstukken, waarin ik op systematische wijze de twee genoemde doelen heb uitgewerkt. In het resterende deel van deze samenvatting zal ik de resultaten van elk van de hoofdstukken kort bespreken, om vervolgens enkele algemene conclusies te trekken.

Hoofdstuk 2

Omdat de relatie tussen leerling en leerkracht dyadisch is, kan de kwaliteit van de relatie afhangen van zowel de eigenschappen van de leerling als de leerkracht. In dit proefschrift ben ik vooral geïnteresseerd in de vraag of en hoe de etnische achtergronden van leerlingen en leerkrachten de onderlinge relatie kunnen beïnvloeden. Omdat onderzoek naar de perceptie van leerkrachten van de leerkracht-leerling relatie verschillen heeft gevonden in de kwaliteit van

de relatie tussen minderheids- versus meerderheidsleerlingen (J. N. Hughes et al., 2006; Saft & Pianta, 2001), wilde ik onderzoeken of dit ook het geval is met betrekking tot de leerling-specifieke self-efficacy van leerkrachten. De eerste onderzoeksvraag is daarom: *in hoeverre ervaren leerkrachten verschillen in self-efficacy bij het lesgeven aan leerlingen met een minderhedenachtergrond en meerderheidsachtergrond? (RQ1a*). Daarnaast wilde ik de omstandigheden onderzoeken waaronder etnische verschillen in leerkracht self-efficacy sterker worden ervaren. Meer specifiek kijk ik hoe probleemgedrag en klassensamenstelling een rol kunnen spelen bij het versterken van etnische verschillen. Probleemgedrag kan een versterkende factor zijn omdat dergelijk gedrag duidelijke communicatie vereist om het gedrag aan te pakken. Etnische verschillen in de dyadische relatie zouden het resultaat kunnen zijn van culturele miscommunicatie en misverstanden (Saft & Pianta, 2001; K. I. Van der Zee et al., 2004), en probleemgedrag kan deze communicatieproblemen beter zichtbaar maken, waardoor meerderheidsleerkrachten minder self-efficacy ervaren met leerlingen uit minderheidsgroepen. Met betrekking tot de etnische samenstelling van de klas, kunnen leerkrachten wellicht minder self-efficacy ervaren met minderheden leerlingen omdat, wanneer er maar weinig leerlingen met een minderheidsachtergrond in de klas zijn, hun etnische achtergrond meer opvalt, of omdat leerkrachten minder ervaring hebben met het lesgeven aan leerlingen uit minderheidsgroepen. Daarom stelde ik de volgende onderzoeksvraag: *In hoeverre hangen etnische verschillen in leerkracht self-efficacy af van het probleemgedrag van leerlingen en van de etnische samenstelling van de klas? (RQ1b)*

Deze vragen zijn onderzocht aan de hand van gegevens van 40 etnisch Nederlandse leerkrachten en hun etnische meerderheids- (N = 112) en minderhedenleerlingen (N = 180). De resultaten van hoofdstuk 2 laten zien dat leerkrachten zich iets minder doeltreffend (self-efficacious) voelen in het lesgeven van minderheden- dan van meerderheidsleerlingen. En het verschil in self-efficacy met beide groepen leerlingen was meer uitgesproken als er tegelijkertijd ook sprake was van internaliserend probleemgedrag bij de leerling en ook iets duidelijker in klassen met relatief weinig leerlingen met een minderheden achtergrond. De bevindingen wijzen op het belang van leerling-specifieke (dyadisch) onderzoek naar self-efficacy van leerkrachten in diverse schoolcontexten.

Hoofdstuk 3

Uit hoofdstuk 2 blijkt dat leerkracht self-efficacy minder positief kan worden ervaren in relatie tot minderhedenleerlingen. In eerder onderzoek werd aangetoond dat affectieve/emotionele relatie tussen leerkracht en minderhedenleerlingen als minder positief kan worden ervaren. Ik wilde daarom verder weten in welke mate self-efficacy en affectieve aspecten van de leerkracht-leerling relatie gevolgen hebben voor de schoolse ontwikkeling van leerlingen. Er is behoorlijk wat onderzoek gedaan naar de gunstige effecten van affectieve leerkracht-leerling relaties op academische betrokkenheid en prestatie (zie Roorda et al., 2017). De rol van self-efficacy van leerkrachten in leerling-leerkrachtrelaties heeft echter veel minder aandacht gekregen. Dat is nu beter mogelijk vanwege de recente conceptualisering van self-efficacy als een kenmerk van de onderlinge relatie in plaats van als leerkrachtkenmerk (M. Zee et al., 2018). Ik onderzocht daarom hoe de leerling-specifieke self-efficacy van leerkrachten en de affectieve kwaliteit van de leerkracht-leerling relatie verband houden met de academische betrokkenheid van leerlingen. De onderzoeksvraag is: *In hoeverre zijn de self-efficacy en affectieve kwaliteit van leerkrachten in leerkracht-leerling relaties gerelateerd aan academische betrokkenheid over de tijd? (RQ2a).* Verder heeft bestaand onderzoek niet onderzocht hoe beide aspecten van de dyadische relatie met elkaar kunnen interacteren in de beïnvloeding van de leerresultaten van leerlingen. Daarom stelde ik de vraag: *In hoeverre interacteren affectieve kwaliteit en self-efficacy van leerkrachten in leerkracht-leerling relaties in hun relatie met met betrokkenheid? (RQ2b).* Ten slotte wilde ik, gezien de culturele diversiteit in Nederlandse klassen en het feit dat leerlingen met een etnische minderheidsachtergrond meer risico lopen op academisch onderpresteren (Curran & Kellogg, 2016; Heath et al., 2008), mogelijke etnische verschillen onderzoeken: *In welke mate zijn self-efficacy en affectie in dyadische leerkracht-leerling relaties vergelijkbaar of verschillend gerelateerd aan de leeruitkomsten van meerderheids- en minderhedenleerlingen? (RQ2c)*

Om deze vragen systematisch te onderzoeken, heb ik een longitudinaal autoregressief paneldesign gebruikt, waarbij effecten worden gecontroleerd voor de mate van betrokkenheid in de klas op een eerder tijdstip. Ik gebruikte verder een leerling-specifieke meting van de self-efficacy van leerkrachten en longitudinale dyadische gegevens verzameld onder 38 etnisch Nederlandse (meerderheid) leerkrachten in het basisonderwijs, 92 etnisch Nederlandse leerlingen en 137 niet-etnische Nederlandse (minderheden) leerlingen. De resultaten laten zien dat ondersteunende dyadische relaties tussen leerlingen en leerkrachten van enige betekenis zijn voor de schoolse ontwikkeling van leerlingen. Zowel de affectieve eigenschappen van de

leerkracht-leerlingrelatie als de self-efficacy van de leerkracht bleken verband te houden met de academische betrokkenheid van leerlingen over de tijd; meer conflicten en een lagere self-efficacy van de leerkracht hielden hingen samen met een lagere academische betrokkenheid. Affectieve warmte in de relatie was echter niet gerelateerd met de betrokkenheid van leerlingen. Blijkbaar was de afwezigheid van conflicten in de leerkracht-leerlingrelatie gunstiger dan de aanwezigheid van nabijheid en warmte. Dit komt overeen met eerder onderzoek (Roorda et al., 2017) en het idee dat mensen de neiging hebben meer te worden beïnvloed door negatieve dan positieve situaties en gebeurtenissen (zie Baumeister et al., 2001).

Hoofdstuk 4

De literatuur over de rol van leerkrachten bij het tot stand brengen van positieve interetnische attitudes (attitudes over andere etnische groepen) onder hun leerlingen richt zich op de sociale normen die leerkrachten uiten over culturele diversiteit in de klas, zonder rekening te houden met de manier waarop de leerkracht deze normen zelf toepast in zijn of haar relaties met leerlingen. Ik wilde onderzoeken of en in welke mate leerkrachten de attitudes van leerlingen kunnen beïnvloeden, niet alleen door positieve normen over diversiteit, maar ook door de affectieve dyadische relaties die ze met leerlingen ontwikkelen. Eerder onderzoek laat zien dat minderhedenleerlingen positievere opvattingen hebben over de etnische meerderheid wanneer ze een warme relatie ervaren met hun etnische meerderheidsleerkracht (Thijs & Verkuyten, 2012). In dit hoofdstuk bekijk ik of affectieve dyadische relaties met meerderheidsleerkrachten ook verband houden met de attitudes van etnische meerderheidsleerlingen over minderheden. Gebaseerd op de hechtingtheorie werd verwacht dat de veiligheid die leerkrachten bieden, leerlingen het vertrouwen geven om open te staan voor onbekende sociale situaties, zoals interacties met minderhedengroepen. Ik formuleerde de volgende onderzoeksvraag: *Zijn affectieve leerkracht-leerlingrelaties gerelateerd aan attitudes over andere etnische groepen onder meerderheidsleerlingen? (RQ3a).* Bovendien wilde ik beoordelen *in hoeverre deze relatie onafhankelijk is van leerkrachtnormen over culturele diversiteit? (RQ3b).* Er is niet veel bekend over de mechanismen die zouden kunnen verklaren waarom affectieve leerkracht-leerlingrelaties verband houden met de interetnische attitudes van meerderheidsleerlingen. Ik stelde daarom de vraag: *kan de relatie tussen affectieve leerkracht-leerlingrelaties en interetnische attitudes verklaard worden door verminderde intergroepsangst en de motivatie voor openheid voor culturele diversiteit? (RQ3c).*

Deze vragen komen in hoofdstuk 4 aan de orde en worden onderzocht met drie studies. De studies maken gebruik van vergelijkbare datasets die zijn verzameld onder etnisch Nederlandse leerlingen (8-13 jaar). In studie 1 (N = 389) bleken leerkracht-leerlingrelaties gerelateerd te zijn aan positievere attitudes t.o.v. andere etnische groepen, onafhankelijk van factoren die vaak worden gebruikt om dergelijke attitudes van leerlingen te verklaren. Studie 2 (N = 334) repliceerde deze bevindingen en toonde aan dat de impact van leerkracht-leerlingrelaties geen weerspiegeling was van de normen over culturele diversiteit die leerkrachten volgens leerlingen uiten. De resultaten van studie 3 (N = 308) laten zien dat het verband tussen hechte leerkracht-leerlingrelaties en interetnische attitudes van leerlingen indirect verband houdt met interne motivaties voor interculturele openheid, maar niet met externe motivaties of intergroepsangst.

Hoofdstuk 5

Ik wilde niet alleen onderzoeken hoe de attitudes van leerlingen over andere etnische groepen kunnen worden beïnvloed door hun persoonlijke relatie met leerkrachten, maar ook hoe de perceptie van leerlingen over interpersoonlijke relaties in de klas is verbonden met deze attitudes. Eerder onderzoek (Hendrickx, Mainhard, Oudman, et al., 2017) suggereert dat leerlingen de neiging hebben om een voorbeeld te nemen aan de interacties van hun leerkrachten met klasgenoten, en soortgelijke interacties te prefereren. Daarom stelde ik de vraag: *in hoeverre zijn de interetnische attitudes van leerlingen gerelateerd aan waargenomen relaties tussen hun leerkracht en klasgenoten met een meerderheids- en minderheden achtergrond? (RQ4a),* en *werken deze processen op dezelfde manier voor leerlingen uit etnische meerderheids- en leerlingen uit etnische minderhedengroepen*? (RQ4b). Omdat veel van de literatuur over de invloed van leerkrachten op het verminderen van vooroordelen onder leerlingen heeft aangetoond dat het belangrijk is voor leerkrachten om positieve sociale normen over culturele diversiteit uit te drukken, wilde ik ook de interactie tussen leerkrachtnormen en leerkracht-leerlingrelaties onderzoeken. Daarom vroeg ik: *in hoeverre interacteren de leerkrachtnormen over diversiteit met de relaties tussen klasgenoot en leerkracht in hun samenhang met interetnische attitudes van leerlingen? (RQ4c).*

Deze vragen worden beantwoord in hoofdstuk 5 waarin ik onderzocht of en hoe normen en relaties van leerkrachten en klasgenoten op elkaar inwerken om attitudes van leerlingen te beïnvloeden. Gegevens werden verzameld in twee golven onder 186 etnisch Nederlandse (meerderheid) leerlingen en 129 leerlingen met een Turks-Nederlandse of Marokkaans-

Nederlandse (minderheden) achtergrond. De resultaten toonden aan dat zowel meerderheids- als minderhedenleerlingen een negatievere houding aannamen ten opzichte van andere etnische groepen wanneer ze vonden dat hun leerkracht een positieve relatie had met klasgenoten met een etnisch Nederlandse achtergrond en tegelijkertijd maar weinig positieve leerkrachtnormen over culturele diversiteit ervaarden. Etnisch Nederlandse leerlingen hadden een gunstiger houding t.o.v. minderhedengroepen wanneer ze positieve leerkrachtrelaties met klasgenoten uit minderheidsgroepen zagen, maar alleen bij afwezigheid van positieve leerkrachtnormen over diversiteit. Deze resultaten geven aan dat leerlingen in cultureel diverse klassen de interpersoonlijke relaties van hun leerkrachten met klasgenoten kunnen gebruiken om hun eigen opvattingen over etnisch andere groepen te onderbouwen.

Conclusies

In dit proefschrift heb ik een aantal aspecten onderzocht van de uitdagingen die leerkrachten ervaren in klassen met leerlingen met diverse achtergronden. Ik heb me hierbij gericht op twee uitdagingen; het lesgeven aan leerlingen met verschillende culturele achtergronden en het lesgeven over culturele diversiteit. Voor beide uitdagingen heb ik uitgezocht op welke manier interpersoonlijke, dyadische interacties tussen leerkrachten en leerlingen een rol spelen. Voor beide uitdagingen zal ik hier enkele conclusies bespreken.

Uitdaging 1 Lesgeven aan leerlingen met diverse culturele achtergronden

Leerkrachten zijn zich over het algemeen terdege bewust van het belang van positieve interpersoonlijke relaties met hun leerlingen voor de academische en psychosociale ontwikkeling van leerlingen. Wat dat betreft zullen de bevindingen van dit proefschrift misschien niet verrassend zijn. Maar afgezien van de directe voordelen van warme dyadische relaties, illustreert dit proefschrift dat leerkrachten zich ook anders bekwaam of doeltreffend (self-efficacious) kunnen voelen in hun interacties met individuele leerlingen en dat deze gevoelens de academische betrokkenheid van leerlingen kunnen beïnvloeden. Als leerkrachten zich doeltreffend voelen in het lesgeven van een bepaalde leerling, kan die leerling zich meer betrokken voelen bij het schoolwerk. Maar mijn onderzoek heeft ook aangetoond dat wanneer de interpersoonlijke band met de leerling door conflict wordt gekenmerkt, die gevoelens van doeltreffendheid geen positieve impact heeft op de schoolse betrokkenheid van leerlingen.

Een implicatie van deze bevinding is dat leerkrachten en schoolpsychologen kunnen inzetten op de verbetering van de relatie tussen leerling en leerkracht om de schooluitkomsten te bevorderen, en dan met name in relaties die enigszins stroef of gespannen verlopen. Het kan belangrijk zijn om te achterhalen waar en waarom conflicten optreden, maar ook in welke domeinen van lesgeven een leerkracht zich minder doeltreffend voelt bij specifieke leerlingen. Het verlichten van conflicten en het versterken van gevoelens van doeltreffendheid kunnen beide nuttig zijn om de ondersteuning van de leerkracht te verbeteren en daarmee de academische ontwikkeling van leerlingen. Dit kan met name van belang zijn voor leerlingen die risico lopen op ondermaatse prestaties, zoals leerlingen met een lage sociaaleconomische achtergrond of een minderhedenachtergrond.

Hoewel dyadische leerkracht-leerlingrelaties niet simpelweg afhangen van bepaalde leerling-kenmerken, laten de bevindingen van dit proefschrift zien dat de etnische achtergrond van leerlingen een rol kan spelen in de mate waarin leerkrachten zich doeltreffend voelen om een leerling les te geven. Bovendien blijkt dit vooral het geval te zijn als deze leerling probleemgedrag vertoont. Dit kan erop wijzen dat leerkrachten het moeilijker vinden om minderhedenleerlingen met probleemgedrag (vooral internaliserende problemen) te ondersteunen dan etnische meerderheidsleerlingen met probleemgedrag. Dit kan enerzijds te maken hebben met moeilijkheden bij het inschatten en evalueren van probleemgedrag bij leerlingen uit minderhedengroepen, maar kan ook wijzen op moeilijkheden bij het aanpakken van probleemgedrag bij ouders. Leerkrachten kunnen interventies voorstellen om het probleemgedrag te verlichten die gepast zijn vanuit het perspectief van de meerderheidscultuur, maar deze interventies sluiten mogelijk minder goed aan bij de manier waarop minderhedenouders het gedrag van hun kind zouden aanpakken. Gezien het feit dat deze situaties vatbaar zijn voor misverstanden, kan het voor leerkrachten nuttig zijn om hierbij ondersteuning te krijgen van collega's/schoolpsycholoog of middels training.

Uitdaging 2 Lesgeven over culturele diversiteit

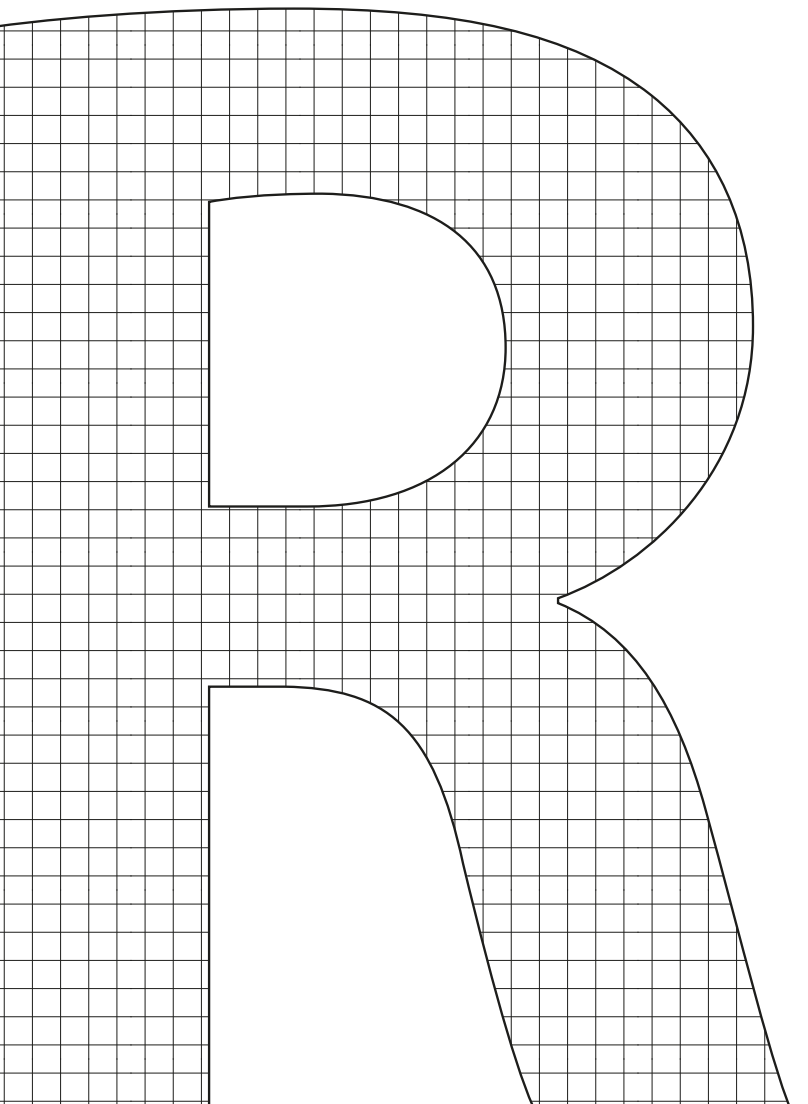
Naast de uitdaging om cultureel diverse leerlingpopulaties te onderwijzen, onderzocht ik de uitdaging om leerlingen over diversiteit te onderwijzen op een manier die bijdraagt aan positieve interetnische relaties. De bevindingen lieten zien dat affectieve leerkracht-leerlingrelaties verband houden met positieve attitudes over etnische minderheden onder etnisch Nederlandse

leerlingen, ongeacht de normen die leerkrachten uitten over culturele diversiteit. En deze relatie kon worden verklaard door interne motivaties voor interculturele openheid, maar niet door verminderde angst voor andere etnische groepen. Dus in plaats van de angst tussen groepen te verminderen lijkt het gevoel van veiligheid dat wordt gegenereerd door affectieve relaties met leerkrachten, leerlingen te motiveren om openheid voor andere groepen te ontwikkelen, wat vervolgens bijdraagt aan meer positieve attitudes.

Een tweede manier waarop affectieve leerkracht-leerlingrelaties verband houden met de interetnische attitudes van leerlingen is door de relaties tussen leerkrachten en klasgenoten in etnisch diverse klassen. Zowel etnische minderheden- als etnische meerderheidsleerlingen in cultureel diverse klassen hebben een positievere houding ten opzichte van andere etnische groepen wanneer ze zien dat hun leerkracht positieve relaties heeft met klasgenoten met een andere etnische achtergrond. Dit is consistent met eerder onderzoek dat stelt dat kinderen het gedrag van leerkrachten observeren op zoek naar gedragsnormen voor wie ze wel of niet leuk zullen vinden (Hendrickx, Mainhard, Boor-Klip, et al., 2017). Mijn bevindingen laten echter ook zien dat leerlingen deze informatie combineren met de meer expliciete normen over culturele diversiteit van de leerkracht. Wanneer leerkrachten niet vaak positieve normen over diversiteit uiten en tegelijkertijd veel omgaan met klasgenoten met een meerderheidsachtergrond, hadden zowel meerderheids- als minderhedenleerlingen minder positieve interetnisch attitudes. En als leerkrachten juist zowel positieve multiculturele normen als positieve relaties met minderheden lieten zien, rapporteerden etnische meerderheidsleerlingen soms zelfs iets meer negatieve opvattingen over minderheden. Deze bevindingen suggereren dat leerkrachten een evenwicht moeten vinden tussen het uiten van positieve normen en het niet lijken te bevoordelen van oftewel meerderheids- als minderhedengroepen. Voor leerlingen met een minderhedenachtergrond zijn leerkrachtnormen over culturele diversiteit nodig om te voorkomen dat zij de leerkracht ervaren als iemand die wellicht een voorkeur heeft voor leerlingen uit de eigen etnische meerderheidsgroep. Voor meerderheidsleerlingen moeten de leerkrachtnormen over culturele diversiteit juist minder uitgesproken zijn om de perceptie te voorkomen dat de leerkracht een voorkeur heeft voor interacties met de etnische minderheden in de klas. Mogelijk worden multiculturele waarden gezien als gericht op etnische minderhedengroepen en daardoor als uitsluiting van etnische meerderheidsleden. Dit sluit aan bij literatuur die pleit voor een 'inclusieve multiculturalistische' leerkrachtnorm waarin ook etnische meerderheidsgroepen

zich opgenomen voelen in de culturele diversiteit in de klas (Plaut et al., 2011). Op deze manier kunnen meerderheidsleerlingen de normatieve ondersteuning krijgen die ze nodig hebben, terwijl minderhedenleerlingen zich niet buitengesloten voelen.

Kortom, de affectieve relatie van leerkrachten met hun leerlingen kan een positieve invloed hebben op hoe deze leerlingen denken over andere etnische groepen. Affectieve interpersoonlijke relaties met leerlingen komen op een directe manier ten goede aan de positieve attitudes van zowel meerderheids- als minderhedenleerlingen. Maar ze zijn ook indirect gerelateerd aan de attitudes van leerlingen, omdat leerlingen relaties tussen leerkrachten en klasgenoten observeren en de gedragsnormen gebruiken die ze uit deze relaties afleiden om hun eigen attitudes over andere etnische groepen te bepalen. Om te voorkomen dat leerkrachten bepaalde etnische groepen lijken te bevoordelen, lijkt het dus belangrijk om multiculturele normen te communiceren die worden beschouwd als inclusief voor zowel minderheids- als meerderheidsleerlingen.



References

Aboud, F. E. (1988). *Children and prejudice*. New York, NY: Blackwell.

Aboud, F. E., Mendelson, M. J., & Purdy, K. T. (2003). Cross-race peer relations and friendship quality. *International Journal of Behavioral Development*, *27*, 165–173. https://doi.org/10.1080/01650250244000164

Aboud, F. E., Tredoux, C., Tropp, L. R., Brown, C. S., Niens, U., & Noor, N. M. (2012). Interventions to reduce prejudice and enhance inclusion and respect for ethnic differences in early childhood: A systematic review. *Developmental Review*, *32*, 307–336. https://doi.org/10.1016/j.dr.2012.05.001

Abu-Tineh, A. M., Khasawneh, S. A., & Khalaileh, H. A. (2011). Teacher self-efficacy and classroom management styles in jordanian schools. *Management in Education*. https://doi.org/10.1177/0892020611420597

Ainsworth, M. D. S. (1973). The development of infant-mother attachment. In B. Cardwell & H. Ricciuti (Eds.), *Review of Child Development Research* (p. Vol. 3, 1-94). Chicago: University of Chicago Press.

Ainsworth, M. D. S. (1989). Attachments beyond infancy. *American Psychologist*, *44*(4), 709–716.

Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., & Waters, L. (2018). What schools need to know about fostering school belonging: a meta-analysis. *Educational Psychology Review*, *30*, 1–34. https://doi.org/10.1007/s10648-016-9389-8

Almog, O., & Shechtman, Z. (2007). Teachers' democratic and efficacy beliefs and styles of coping with behavioural problems of pupils with special needs. *European Journal of Special Needs Education*, *22*(2), 115–129. https://doi.org/10.1080/08856250701267774

Auwarter, A. E., & Aruguete, M. S. (2008). Effects of Student Gender and Socioeconomic Status on Teacher Perceptions. *The Journal of Educational Research*, *101*(4), 242–246. https://doi.org/10.3200/JOER.101.4.243-246

Baker, J. A. (2006). Contributions of teacher–child relationships to positive school adjustment during elementary school. *Journal of School Psychology*, *44*(3), 211–229. https://doi.org/10.1016/j.jsp.2006.02.002

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. New York: W. H. Freeman and Company.

Bandura, A. (2001). Social cognitive theory: an agentic perspective. *Annual Review of Psychology*, *52*(1), 1–26. https://doi.org/10.1146/annurev.psych.52.1.1

Banks, J. A. (2004). Multicultural education: Historical development, dimensions, and practice. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research on multicultural education* (2nd ed., pp. 3–29). San Francisco, CA: Jossey-Bass.

Banks, J. A., & Banks, C. A. M. (Eds.). (1995). *Handbook of multicultural education*. New York, NY: MacMillan.

Banks, J. A., Boykin, A. W., Cookson, P. W., Elliott, D., Grusky, D., Marshall, K., … Weis, L. (2015). *Opening the doors to opportunity for all: Setting a research agenda for the future*. Washington, DC: American Institutes for Research.

Bates, L. A., & Glick, J. E. (2013). Does it matter if teachers and schools match the student? Racial and ethnic disparities in problem behaviors. *Social Science Research*, *42*(5), 1180–1190. https://doi.org/10.1016/j.ssresearch.2013.04.005

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad Is Stronger Than Good. *Review of General Psychology*, *5*, 323–370. https://doi.org/10.1037/1089-2680.5.4.323

Baysu, G., Celeste, L., Brown, R., Verschueren, K., & Phalet, K. (2016). Minority Adolescents in Ethnically Diverse Schools: Perceptions of Equal Treatment Buffer Threat Effects. *Child Development*, *87*(5), 1352–1366. https://doi.org/10.1111/cdev.12609

Bellmore, A. D., Nishina, A., Witkow, M. R., Graham, S., & Juvonen, J. (2007). The influence of classroom ethnic composition on same- and other-ethnicity peer nominations in middle school. *Social Development*, *16*, 720–740. https://doi.org/10.1111/j.1467-9507.2007.00404.x

Bergin, C., & Bergin, D. (2009). Attachment in the Classroom. *Educational Psychology Review*, *21*(2), 141–170. https://doi.org/10.1007/s10648-009-9104-0

Besley, T., & Peters, M. A. (Eds.). (2012). *Interculturalism, Education and Dialogue*. New York: Peter Lang.

Bigler, R. S. (1999). The use of multicultural curricula and materials to counter racism in children. *Journal of Social Issues*, *55*, 687–705. https://doi.org/10.1111/0022-4537.00142

Binder, J., Zagefka, H., Brown, R., Funke, F., Kessler, T., Mummendey, A., … Leyens, J.-P. P. (2009). Does contact reduce prejudice or does prejudice reduce contact? A longitudinal test of the contact hypothesis among majority and minority groups in three European countries. *Journal of Personality and Social Psychology*, *96*(4), 843–856. https://doi.org/10.1037/a0013470

Birch, S. H., & Ladd, G. W. (1996). Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In J. Juvonen & K. R. Wentzel (Eds.), *Social Motivation: Understanding children's school adjustment.* (pp. 199–225). New York, NY: Cambridge University Press.

Blake, J. J., Smith, D. M., Marchbanks, M. P., Seibert, A. L., Wood, S. M., & Kim, E. S. (2016). Does student–teacher racial/ethnic match impact Black students' discipline risk? A test of the cultural synchrony hypothesis. In *Inequality in school discipline* (pp. 79–98). Springer.

Boag, E. M., & Carnelley, K. B. (2012). Self-reported discrimination and discriminatory behaviour: the role of attachment security. *British Journal of Social Psychology*, *51*(2), 393–403. https://doi.org/10.1111/j.2044-8309.2011.02065.x

Boag, E. M., & Carnelley, K. B. (2016). Attachment and prejudice: The mediating role of empathy. *The*

British Journal of Social Psychology, *55*(2), 337–356. https://doi.org/10.1111/bjso.12132

Bohlin, G., Hagekull, B., & Rydell, A.-M. (2000). Attachment and Social Functioning: A Longitudinal Study from Infancy to Middle Childhood. *Social Development*, *9*(1), 24–39. https://doi.org/10.1111/1467-9507.00109

Boor-Klip, H. J., Segers, E., Hendrickx, M. M. H. G., & Cillessen, A. H. M. (2017). The moderating role of classroom descriptive norms in the association of student behavior with social preference and popularity. *The Journal of Early Adolescence*, *37*, 387–413. https://doi.org/10.1177/0272431615609158

Bosman, R. J., Zee, M., & Koomen, H. M. Y. (2019). Do Teachers Have Different Mental Representations of Relationships With Children in Cases of Hyperactivity Versus Conduct Problems? *School Psychology Review*, *48*(4), 333–347. https://doi.org/10.17105/SPR-2018-0086.V48-4

Bowlby, J. (1982). *Attachment and loss: Vol. 1 attachment* (2nd ed.). New York: Basic Books.

Bowlby, J. (1988). *A secure base: Parent-Child attachment and healthy human development*. New York, NY: Basic Books.

Brown, C. S. (2017). *Discrimination in childhood and adolescence: A developmental intergroup approach*. New York, NY: Routledge.

Brown, C. S., & Bigler, R. S. (2002). Effects of minority status in the classroom on children's intergroup attitudes. *Journal of Experimental Child Psychology*, *83*, 77–110. https://doi.org/10.1016/S0022-0965(02)00123-6

Brown, C. S., Spatzier, A., & Tobin, M. (2010). Variability in the intergroup attitudes of white children: What we can learn from their ethnic identity labels. *Social Development*, *19*, 758–778. https://doi.org/10.1111/j.1467-9507.2009.00571.x

Brown, R., & Hewstone, M. (2005). An integrative theory of intergroup contact. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 37, pp. 255–343). London, UK: Elsevier. https://doi.org/10.1016/S0065-2601(05)37005-5

Brumariu, L. E., & Kerns, K. A. (2008). Mother-Child Attachment and Social Anxiety Symptoms in Middle Childhood. *Journal of Applied Developmental Psychology*, *29*(5), 393–402. https://doi.org/10.1016/j.appdev.2008.06.002

Buhrmester, D., & Wyndol, F. (1987). The Development of Companionship and Intimacy. *Child Development*, *58*, 1101–1113. https://doi.org/10.1111/1467-8624.ep8590161

Byrd, C. M. (2014). The associations of intergroup interactions and school racial socialization with academic motivation. *The Journal of Educational Research*, *108*, 10–21. https://doi.org/10.1080/00220671.2013.831803

Cameron, L., Rutland, A., Hossain, R., & Petley, R. (2011). When and why does extended contact work? *Group Processes & Intergroup Relations*, *14*, 193–206. https://doi.org/10.1177/1368430210390535

Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology*, *44*(6), 473–490. https://doi.org/10.1016/j.jsp.2006.09.001

Cassidy, J., & Shaver, P. R. (Eds.). (2008). The nature of the child's ties. In *Handbook of Attachment: Theory, Reseach and Clinical Applications* (2nd ed., pp. 3–22). New York, NY: The Guildford Press.

CBS. (2018a). Bevolking; generatie, geslacht, leeftijd en migratieachtergrond, 1 januari. Retrieved June 9, 2019, from https://opendata.cbs.nl/statline/#/CBS/nl/dataset/37325/table?ts=1560106709798

CBS. (2018b). Bevolking naar migratieachtergrond. Retrieved June 9, 2019, from https://www.cbs.nl/nl-nl/achtergrond/2018/51/prognose-bevolking-naar-migratieachtergrond

CBS. (2018c). Prognose bevolking naar migratieachtergrond. Retrieved June 9, 2019, from https://www.cbs.nl/nl-nl/achtergrond/2018/51/prognose-bevolking-naar-migratieachtergrond

Chan, D. W. (2008). General, collective, and domain-specific teacher self-efficacy among Chinese prospective and in-service teachers in Hong Kong. *Teaching and Teacher Education*, *24*(4), 1057–1069. https://doi.org/10.1016/j.tate.2007.11.010

Chung, A., & Rimal, R. N. (2016). Social norms: A review. *Review of Communication Research*, *4*, 1–28. https://doi.org/10.12840/issn.2255-4165.2016.04.01.008

Church, A. T., Katigbak, M. S., Locke, K. D., Zhang, H., Shen, J., De Jesús Vargas-Flores, J., … Ching, C. M. (2013). Need Satisfaction and Well-Being: Testing Self-Determination Theory in Eight Cultures. *Journal of Cross-Cultural Psychology*, *44*(4), 507–534. https://doi.org/10.1177/0022022112466590

Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, *58*, 1015–1026. https://doi.org/10.1037/0022-3514.58.6.1015

Correll, J., Park, B., & Allegra Smith, J. (2008). Colorblind and multicultural prejudice reduction strategies in high-conflict situations. *Group Processes and Intergroup Relations*, *11*, 471–491. https://doi.org/10.1177/1368430208095401

Crandall, C. S., Eshleman, A., & O'Brien, L. (2002). Social norms and the expression and suppression of prejudice: the struggle for internalization. *Journal of Personality and Social Psychology*, *82*(3), 359–378. https://doi.org/10.1037/0022-3514.82.3.359

Crijnen, A. A. M., Bengi-Arslan, L., & Verhulst, F. C. (2000). Teacher-reported problem behaviour in Turkish immigrant and Dutch children: a cross-cultural comparison. *Acta Psychiatrica Scandinavica*, *102*(6), 439–444. https://doi.org/10.1034/j.1600-0447.2000.102006439.x

Curran, F. C., & Kellogg, A. T. (2016). Understanding science achievement gaps by race/ethnicity and gender in kindergarten and first grade. *Educational Researcher*, *45*(5), 273–282. https://doi.org/10.3102/0013189X16656611

Davies, K., Tropp, L. R., Aron, A., Pettigrew, T. F., & Wright, S. C. (2011). Cross-group friendships and intergroup attitudes: A meta-analytic review. *Personality and Social Psychology Review*, *15*, 332–351. https://doi.org/10.1177/1088868311411103

Davis, H. A. (2003). Conceptualizing the role and influence of student-teacher relationships on children's social and cognitive development. *Educational Psychologist*, *38*, 207–234. https://doi.org/10.1207/S15326985EP3804

De Jong, E. M., Koomen, H. M. Y., Jellesma, F. C., & Roorda, D. L. (2018). Teacher and child perceptions of relationship quality and ethnic minority children's behavioral adjustment in upper elementary school: A cross-lagged approach. *Journal of School Psychology*, *70*, 27–43. https://doi.org/10.1016/j.jsp.2018.06.003

De Mooij, M., Bloemendal, C., & Dieleman, D. (Eds.). (2018). *Jaarrapport integratie 2018*. Den Haag: Centraal Bureau voor de Statistiek.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology*, *49*, 182–185. https://doi.org/10.1037/a0012801

Deci, E. L., & Ryan, R. M. (2016). Optimizing Students' Motivation in the Era of Testing and Pressure: A Self-Determination Theory Perspective. In W. C. Liu, J. C. K. Wang, & R. M. Ryan (Eds.), *Building Autonomous Learners* (pp. 9–29). Singapore: Springer Singapore. https://doi.org/10.1007/978-981-287-630-0_2

Dee, T. S. (2005). A Teacher Like Me: Does Race, Ethnicity, or Gender Matter? *American Economic Review*, *95*(2), 158–165. https://doi.org/10.1257/000282805774670446

Degner, J., & Dalege, J. (2013). The apple does not fall far from the tree, or does it? A meta-analysis of parent–child similarity in intergroup attitudes. *Psychological Bulletin*, *139*, 1270–1304. https://doi.org/10.1037/a0031436

Den Brok, P., 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. *The British Journal of Educational Psychology*, *80*(Pt 2), 199–221. https://doi.org/10.1348/000709909X465632

Dovidio, J. F., Gaertner, S. L., Anastasio, P. A., Bachman, B. A., & Rust, M. C. (1993). The common ingroup identity model: Recategorization and the reduction of intergroup bias. *European Review of Social Psychology*, *4*(1), 1–26. https://doi.org/10.1080/14792779343000004

Dovidio, J. F., Gaertner, S. L., & Saguy, T. (2007). Another view of "we": Majority and minority group perspectives on a common ingroup identity. *European Review of Social Psychology*, *18*(1), 296–330. https://doi.org/10.1080/10463280701726132

Dovidio, J. F., Gaertner, S. L., Ufkes, E. G., Saguy, T., & Pearson, A. R. (2016). Included but Invisible? Subtle Bias, Common Identity, and the Darker Side of "We." *Social Issues and Policy Review*, *10*(1), 6–46. https://doi.org/10.1111/sipr.12017

Dovidio, J. F., Gaertner, S. L., Validzic, A., Matoka, K., Johnson, B., & Frazier, S. (1997). Extending the benefits of recategorization: Evaluations, self-disclosure, and helping. *Journal of Experimental Social Psychology*, *33*, 401–420. https://doi.org/10.1006/jesp.1997.1327

Driessen, G. (2015). Teacher ethnicity, student ethnicity, and student outcomes. *Intercultural Education*, *26*(3), 179–191. https://doi.org/10.1080/14675986.2015.1048049

Dunbar, A. M., & Taylor, B. W. (1982). Children's perceptions of elementary teachers as authority figures. *The Journal of Social Psychology*, *118*, 249–255. https://doi.org/10.1080/00224545.1982.9922804

Ehrlich, H. J. (1974). *The social psychology of prejudice*. New York, NY: John Wiley.

Ewing, A. R., & Taylor, A. R. (2009). The role of child gender and ethnicity in teacher-child relationship quality and children's behavioral adjustment in preschool. *Early Childhood Research Quarterly*, *24*(1), 92–105. https://doi.org/10.1016/j.ecresq.2008.09.002

Feddes, A. R., Noack, P., & Rutland, A. (2009). Direct and extended friendship effects on minority and majority children's interethnic attitudes: A longitudinal study. *Child Development*, *80*, 377–390. https://doi.org/10.1111/j.1467-8624.2009.01266.x

Feinman, S. (1982). Social referencing in infancy. *Merrill-Palmer Quarterly*, *28*, 445–470. Retrieved from http://www.jstor.org/stable/23086154

Fitchett, P. G., Starker, T. V., & Salyers, B. (2012). Examining Culturally Responsive Teaching Self-Efficacy in a Preservice Social Studies Education Course. *Urban Education*, *47*(3), 585–611. https://doi.org/10.1177/0042085912436568

Furrer, C. J., & Skinner, E. A. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, *95*(1), 148–162. https://doi.org/10.1037/0022-0663.95.1.148

Gaikhorst, L., Post, J., März, V., & Soeterik, I. (2020). Teacher preparation for urban teaching: a multiple case study of three primary teacher education programmes. *European Journal of Teacher Education*, *43*(3), 301–317. https://doi.org/10.1080/02619768.2019.1695772

Gay, G., & Howard, T. C. (2000). Multicultural teacher education for the 21st century. *The Teacher Educator*, *36*(1), 1–16. https://doi.org/10.1080/08878730009555246

Geerlings, J., Thijs, J., & Verkuyten, M. (2017). Student-teacher relationships and ethnic outgroup attitudes among majority students. *Journal of Applied Developmental Psychology*, *52*(July), 69–79. https://doi.org/10.1016/j.appdev.2017.07.002

Geerlings, J., Thijs, J., & Verkuyten, M. (2018). Teaching in ethnically diverse classrooms: Examining individual differences in teacher self-efficacy. *Journal of School Psychology*, *67*(August 2017), 134–147. https://doi.org/10.1016/j.jsp.2017.12.001

Geerlings, J., Thijs, J., & Verkuyten, M. (2019). Preaching and practicing multicultural education : Predicting students ' outgroup attitudes from perceived teacher norms and perceived teacher –

classmate relations. *Journal of School Psychology*, *75*, 89–103. https://doi.org/10.1016/j.jsp.2019.07.003

Geldhof, G. J., Preacher, K. J., & Zyphur, M. J. (2014). Reliability estimation in a multilevel confirmatory factor analysis framework. *Psychological Methods*, *19*, 72–91. https://doi.org/10.1037/a0032138

Gharaei, N., Thijs, J., & Verkuyten, M. (2019). Ethnic identity in diverse schools: Preadolescents' private regard and introjection in relation to classroom norms and composition. *Journal of Youth and Adolescence*, *48*, 132–144. https://doi.org/10.1007/s10964-018-0881-y

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology*, *76*(4), 569–582. https://doi.org/10.1037//0022-0663.76.4.569

Gijsberts, M., Huijnk, W., & Dagevos, J. (Eds.). (2012). *Jaarrapport integratie 2011*. Den Haag: Sociaal Cultureel Planbureau.

Gillborn, D. (1990). *Race, ethnicity and education: Teaching and learning in multi-ethnic schools*. London: Unwin Hyman.

Glock, S., & Kovacs, C. (2013). Educational Psychology: Using Insights from Implicit Attitude Measures. *Educational Psychology Review*, *25*(4), 503–522. https://doi.org/10.1007/s10648-013-9241-3

Glock, S., Krolak-Schwerdt, S., Klapproth, F., & Böhmer, M. (2013). Beyond judgment bias: How students' ethnicity and academic profile consistency influence teachers' tracking judgments. *Social Psychology of Education*, *16*(4), 555–573. https://doi.org/10.1007/s11218-013-9227-5

Goddard, R. D., & Goddard, Y. L. (2001). A multilevel analysis of the relationship between teacher and collective efficacy in urban schools. *Teaching and Teacher Education*, *17*, 807–818. https://doi.org/10.1016/s0742-051x(01)00032-4

Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A Research Note. *Journal of Child Psychology and Psychiatry*, *38*(5), 581–586. https://doi.org/10.1111/j.1469-7610.1997.tb01545.x

Goodman, R. (2001). Psychometric properties of the strengths and difficulties questionnaire. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*(11), 1337–1345. https://doi.org/10.1097/00004583-200111000-00015

Gregory, A., Allen, J. P., Mikami, A. Y., Hafen, C. A., & Pianta, R. C. (2014). Eliminating the Racial Disparity in Classroom Exclusionary Discipline. *Journal of Applied Research on Children: Informing Policy for Childern at Risk*, *5*.

Gregory, A., & Mosely, P. M. (2004). The Discipline Gap: Teachers' Views on the Over-Representation of African American Students in the Discipline System. *Equity & Excellence in Education*. https://doi.org/10.1080/10665680490429280

Gregory, A., & Weinstein, R. S. (2004). Connection and regulation at home and in school: Predicting growth in achievement for adolescents. *Journal of Adolescent Research*, *19*, 405–427.

https://doi.org/10.1177/0743558403258859

Grütter, J., & Meyer, B. (2014). Intergroup friendship and children's intentions for social exclusion in integrative classrooms: the moderating role of teachers' diversity beliefs. *Journal of Applied Social Psychology*, n/a-n/a. https://doi.org/10.1111/jasp.12240

Guskey, T. R., & Passaro, P. D. (1994). Teacher Efficacy: A Study of Construct Dimensions. *American Educational Research Journal*, *31*(3), 627–643. https://doi.org/10.3102/00028312031003627

Hachfeld, A., Hahn, A., Schroeder, S., Anders, Y., & Kunter, M. (2015). Should teachers be colorblind? How multicultural and egalitarian beliefs differentially relate to aspects of teachers' professional competence for teaching in diverse classrooms. *Teaching and Teacher Education*, *48*, 44–55. https://doi.org/10.1016/j.tate.2015.02.001

Hajovsky, D. B., Mason, B. A., & Mccune, L. A. (2017). Teacher-student relationship quality and academic achievement in elementary school : A longitudinal examination of gender. *Journal of School Psychology*, *63*, 119–133. https://doi.org/10.1016/j.jsp.2017.04.001

Hamaker, E. L., Kuiper, R. M., & Grasman, R. P. P. P. (2015). A critique of the cross-lagged panel model. *Psychological Methods*, *20*, 102–116. https://doi.org/10.1037/a0038889

Hamilton, C. E., & Howes, C. (1992). A comparison of young children's relationships with mothers and teachers. In R. C. Pianta (Ed.), *New directions for child development: Vol. 57. Beyond the parent: The role of other adults in children's lives* (pp. 41–60). San Francisco, CA: Jossey Bass.

Hamre, B. K., & Pianta, R. C. (2001). Early Teacher-Child Relationships and the Trajectory of Children's School Outcomes through Eighth Grade. *Child Development*, *72*(2), 625–638. https://doi.org/10.1111/1467-8624.00301

Hamre, B. K., & Pianta, R. C. (2006). Student – Teacher Relationships. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 59–71). Washington, DC: National Association of School Psychologists.

Hamre, B. K., Pianta, R. C., Downer, J. T., DeCoster, J., Mashburn, A. J., Jones, S. M., … Rivers, S. E. (2013). Teaching through Interactions. *The Elementary School Journal*, *113*, 461–487. https://doi.org/10.1086/669616

Hamre, B. K., Pianta, R. C., Downer, J. T., & Mashburn, A. J. (2008). Teachers' perceptions of conflict with young students: Looking beyond problem behaviors. *Social Development*. https://doi.org/10.1111/j.1467-9507.2007.00418.x

Hartgers, M. (2007). Scholen in de randstad sterk gekleurd. *Sociaaleconomische Trends*, *4*(3), 12–18.

Hazan, C., & Shaver, P. R. (1994). Attachment as an Organizational Framework for Research on Close Relationships. *Psychological Inquiry*, *5*(1), 1–22. https://doi.org/10.1207/s15327965pli0501_1

Heath, A. F., Rothon, C., & Kilpi, E. (2008). The Second Generation in Western Europe: Education, Unemployment, and Occupational Attainment. *Annual Review of Sociology*, *34*, 211–235. https://doi.org/10.1146/annurev.soc.34.040507.134728

Hendrickx, M. M. H. G., Mainhard, T., Boor-Klip, H. J., & Brekelmans, M. (2017). Our teacher likes you, so I like you: A social network approach to social referencing. *Journal of School Psychology*, *63*, 35–48. https://doi.org/10.1016/j.jsp.2017.02.004

Hendrickx, M. M. H. G., Mainhard, T., Oudman, S., Boor-Klip, H. J., & Brekelmans, M. (2017). Teacher behavior and peer liking and disliking: The teacher as a social referent for peer status. *Journal of Educational Psychology*, *109*, 546–558. https://doi.org/10.1037/edu0000157

Hermans, P. (2002). Intercultural Education in Two Teacher-training Courses in the North of the Netherlands. *Intercultural Education*, *13*(2), 183–199. https://doi.org/10.1080/14675980220129004

Hindriks, P., Verkuyten, M., & Coenders, M. (2014). Interminority Attitudes: The Roles of Ethnic and National Identification, Contact, and Multiculturalism. *Social Psychology Quarterly*, *77*(1), 54–74. https://doi.org/10.1177/0190272513511469

Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London: McGraw Hill.

Hofstra, J., Van Oudenhoven, J. P., & Buunk, B. P. (2005). Attachment styles and majority members' attitudes towards adaptation strategies of immigrants. *International Journal of Intercultural Relations*, *29*(5), 601–619. https://doi.org/10.1016/j.ijintrel.2005.05.009

Hogg, M. A., & Terry, D. J. (2000). Social identity and self-categorization processes in organizational contexts. *Academy of Management Review*, *25*(1), 121–140. https://doi.org/10.5465/AMR.2000.2791606

Howes, C. (2000). Social-emotional Classroom Climate in Child Care, Child-Teacher Relationships and Children's Second Grade Peer Relations. *Social Development*, *9*(2), 191–204. https://doi.org/10.1111/1467-9507.00119

Howes, C., & Hamilton, C. E. (1993). The changing experience of child care: Changes in teachers and in teacher-child relationships and children's social competence with peers. *Early Childhood Research Quarterly*, *8*(1), 15–32. https://doi.org/10.1016/S0885-2006(05)80096-1

Howes, C., & Shivers, E. M. (2006). New Child-Caregiver Attachment Relationships: Entering Childcare When the Caregiver Is and Is Not an Ethnic Match. *Social Development*, *15*(4), 574–590. https://doi.org/10.1111/j.1467-9507.2006.00358.x

Howes, C., & Spieker, S. (2008). Attachment Relationships in the Context of Multiple Caregivers. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of Attachment: Theory, Reseach and Clinical Applications* (2nd ed., pp. 317–332). New York, NY: The Guildford Press.

Hughes, J. M., Alo, J., Krieger, K., & O'Leary, L. M. (2016). Emergence of internal and external motivations to respond without prejudice in White children. *Group Processes & Intergroup Relations*, *19*, 202–216. https://doi.org/10.1177/1368430215603457

Hughes, J. N. (2011). Longitudinal effects of teacher and student perceptions of teacher-student relationship qualities on academic adjustment. *Elementary School Journal*, *112*, 38–60.

https://doi.org/10.1086/660686.Longitudinal

Hughes, J. N., & Cao, Q. (2018). Trajectories of teacher-student warmth and conflict at the transition to middle school: Effects on academic engagement and achievement, *67*, 148–162. https://doi.org//10.1016/j.jsp.2018.10.03

Hughes, J. N., Cavell, T. A., & Willson, V. (2001). Further support for the developmental significance of the quality of the teacher-student relationship. *Journal of School Psychology*, *39*, 289–301. https://doi.org/10.1016/S0022-4405(01)00074-7

Hughes, J. N., Gleason, K. A., & Zhang, D. (2005). Relationship influences on teachers' perceptions of academic competence in academically at-risk minority and majority first grade students. *Journal of School Psychology*, *43*, 303–320. https://doi.org/10.1016/j.jsp.2005.07.001

Hughes, J. N., Im, M. H., & Allee, P. J. (2015). Effect of school belonging trajectories in grades 6–8 on achievement: Gender and ethnic differences. *Journal of School Psychology*, *53*, 493–507. https://doi.org/10.1016/j.jsp.2015.08.001

Hughes, J. N., Im, M. H., & Wehrly, S. E. (2014). Effect of peer nominations of teacher-student support at individual and classroom levels on social and academic outcomes. *Journal of School Psychology*, *52*, 309–322. https://doi.org/10.1016/j.jsp.2013.12.004

Hughes, J. N., & Kwok, O. (2007). Influence of student-teacher and parent-teacher relationships on lower achieving readers' engagement and achievement in the primary grades. *Journal of Educational Psychology*, *99*, 39–51. https://doi.org/10.1037/0022-0663.99.1.39

Hughes, J. N., Luo, W., Kwok, O. M., & Loyd, L. K. (2008). Teacher-Student Support, Effortful Engagement, and Achievement: A 3-Year Longitudinal Study. *Journal of Educational Psychology*, *100*, 1–14. https://doi.org/10.1037/0022-0663.100.1.1

Hughes, J. N., Zhang, D., & Hill, C. R. (2006). Peer assessments of normative and individual teacher–student support predict social acceptance and engagement among low-achieving children. *Journal of School Psychology*, *43*, 447–463. https://doi.org/10.1016/j.jsp.2005.10.002

Huijnk, W., Gijsberts, M., & Dagevos, J. (2014). *Jaarrapport Integratie 2013*. Den Haag.

Inspectie van het Onderwijs. (2019). *De staat van het onderwijs 2019*. Utrecht: Inspectie van het Onderwijs. Retrieved from https://mijn.govunited.nl/blg-221895.pdf

Irizarry, Y. (2015). Selling students short: Racial differences in teachers' evaluations of high, average, and low performing students. *Social Science Research*, *52*, 522–538. https://doi.org/10.1016/j.ssresearch.2015.04.002

Jamil, F. M., Sabol, T. J., Hamre, B. K., & Pianta, R. C. (2015). Assessing Teachers' Skills in Detecting and Identifying Effective Interactions in the Classroom. *The Elementary School Journal*, *115*, 407–432. https://doi.org/10.1086/680353

Jellesma, F. C., Zee, M., & Koomen, H. M. Y. (2015). Children's perceptions of the relationship with the teacher: Associations with appraisals and internalizing problems in middle childhood. *Journal*

of Applied Developmental Psychology, *36*, 30–38. https://doi.org/10.1016/j.appdev.2014.09.002

Jetten, J., Spears, R., & Manstead, A. S. R. (1996). Intergroup norms and intergroup discrimination: Distinctive self-categorization and social identity effects. *Journal of Personality and Social Psychology*, *71*, 1222–1233. https://doi.org/10.1037/0022-3514.71.6.1222

Kalmijn, M., & Kraaykamp, G. (2003). Dropout and downward mobility in the educational career: An event-history analysis of ethnic schooling differences in the Netherlands. *Educational Research and Evaluation*, *9*, 265–287. https://doi.org/http://dx.doi.org/10.1076/edre.9.3.265.15572

Karssen, M., Van der Veen, I., & Volman, M. (2016). Ethnic diversity in schools and bi-ethnic Dutch students' educational outcomes and social functioning. *School Effectiveness and School Improvement*, *27*(4), 613–628. https://doi.org/10.1080/09243453.2016.1189436

Karsten, S., Ledoux, G., Roeleveld, J., Felix, C., & Elshof, D. (2003). School Choice and Ethnic Segregation. *Educational Policy*, *17*(4), 452–477. https://doi.org/10.1177/0895904803254963

Karsten, S., Roeleveld, J., Ledoux, G., Felix, C., & Elshof, D. (2002). Schoolkeuze en ethnische segregatie in het basisonderwijs. *Pedagogische Studiën*, *79*, 359–375.

Kelman, H. C. (1958). Compliance, identification, and internalization: Three processes of attitude change. *Journal of Conflict Resolution*, *2*, 51–60. https://doi.org/10.1177/002200275800200106

Kestenbaum, R., Farber, E. A., & Sroufe, L. A. (1989). Individual differences in empathy among preschoolers: Relation to attachment history. *New Directions for Child and Adolescent Development*, (44), 51–64. https://doi.org/10.1002/cd.23219894405

Killen, M., Hitti, A., & Mulvey, K. L. (2015). Social development and intergroup relations. In M. Mikulincer & P. R. Shaver (Eds.), *APA Handbook of Personality and Social Psychology, Volume 2: Group Processes.* (1st ed., pp. 177–201). Washington: American Psychological Association. https://doi.org/10.1037/14342-007

King, R. B. (2015). Sense of relatedness boosts engagement, achievement, and well-being: A latent growth model study. *Contemporary Educational Psychology*, *42*, 26–38. https://doi.org/10.1016/j.cedpsych.2015.04.002

Klassen, R. M., & Chiu, M. M. (2010). Effects on Teachers' Self-Efficacy and Job Satisfaction: Teacher Gender, Years of Experience, and Job Stress. *Journal of Educational Psychology*, *102*(3), 741–756. https://doi.org/10.1037/a0019237

Klassen, R. M., Tze, V. M. C., Betts, S. M., & Gordon, K. A. (2011). Teacher Efficacy Research 1998–2009: Signs of Progress or Unfulfilled Promise? *Educational Psychology Review*, *23*(1), 21–43. https://doi.org/10.1007/s10648-010-9141-8

Koepke, M. F., & Harkins, D. A. (2008). Conflict in the Classroom: Gender Differences in the Teacher–Child Relationship. *Early Education & Development*, *19*(6), 843–864. https://doi.org/10.1080/10409280802516108

Koomen, H. M. Y., & Jellesma, F. C. (2015). Can closeness, conflict, and dependency be used to

characterize students' perceptions of the affective relationship with their teacher? Testing a new child measure in middle childhood. *British Journal of Educational Psychology*, *85*(4), 479–497. https://doi.org/10.1111/bjep.12094

Koomen, H. M. Y., Verschueren, K., Van Schooten, E., 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. https://doi.org/10.1016/j.jsp.2011.09.001

Kozlowski, K. P. (2015). Culture or Teacher Bias? Racial and Ethnic Variation in Student–Teacher Effort Assessment Match/Mismatch. *Race and Social Problems*, *7*(1), 43–59. https://doi.org/10.1007/s12552-014-9138-x

Kunemund, R. L., Nemer McCullough, S., Williams, C. D., Miller, C. C., Sutherland, K. S., Conroy, M. A., & Granger, K. (2020). The mediating role of teacher self-efficacy in the relation between teacher–child race mismatch and conflict. *Psychology in the Schools*, (March), pits.22419. https://doi.org/10.1002/pits.22419

Ladd, G. W., Kochenderfer-Ladd, B., & Rydell, A. (2011). Children's interpersonal skills and school-based relationships. *The Wiley-Blackwell Handbook of Childhood Social Development*, 181–206.

Le Roux, J. (2002). Effective educators are culturally competent communicators. *Intercultural Education*, *13*(1), 37–48. https://doi.org/10.1080/1467598012011292

Legault, L., Green-Demers, I., Grant, P., & Chung, J. (2007). On the Self-Regulation of Implicit and Explicit Prejudice: A Self -Determination Theory Perspective. *Personality and Social Psychology Bulletin*, *33*, 732–749. https://doi.org/10.1177/0146167206298564

Leung, A. K., Maddux, W. W., Galinsky, A. D., & Chiu, C. (2008). Multicultural experience enhances creativity: The when and how. *American Psychologist*, *63*(3), 169–181. https://doi.org/10.1037/0003-066X.63.3.169

Levy, S. R., & Killen, M. (Eds.). (2010). *Intergroup Attitudes and Relations*. Oxford, UK: Oxford University Press.

Little, M., & Kobak, R. (2003). Emotional Security With Teachers and Children's Stress Reactivity: A Comparison of Special-Education and Regular-Education Classrooms. *Journal of Clinical Child and Adolescent Psychology*, *32*(1), 127–138. https://doi.org/10.1207/15374420360533121

Lopez, F. G., & Brennan, K. A. (2000). Dynamic processes underlying adult attachment organization: Toward an attachment theoretical perspective on the healthy and effective self. *Journal of Counseling Psychology*, *47*, 283–300. https://doi.org/10.1037//0022-0167.47.3.283

Ly, J., Zhou, Q., Chu, K., & Chen, S. H. (2012). Teacher-child relationship quality and academic achievement of Chinese American children in immigrant families. *Journal of School Psychology*, *50*, 535–553. https://doi.org/10.1016/j.jsp.2012.03.003

McAllister, G., & Irvine, J. J. (2000). Cross Cultural Competency and Multicultural Teacher Education.

Review of Educational Research, *70*(1), 3–24. https://doi.org/10.3102/00346543070001003

McGrath, K. F., & Van Bergen, P. (2015a). Who, when, why and to what end? Students at risk of negative student-teacher relationships and their outcomes. *Educational Research Review*, *14*, 1–17. https://doi.org/10.1016/j.edurev.2014.12.001

McGrath, K. F., & Van Bergen, P. (2015b). Who, when, why and to what end? Students at risk of negative student–teacher relationships and their outcomes. *Educational Research Review*, *14*, 1–17. https://doi.org/10.1016/j.edurev.2014.12.001

McGuire, L., Rutland, A., & Nesdale, D. (2015). Peer group norms and accountability moderate the effect of school norms on children's intergroup attitudes. *Child Development*, *86*, 1290–1297. https://doi.org/10.1111/cdev.12388

Mckimmie, B. M., Terry, D. J., Hogg, M. A., Manstead, A. S. R., & Spears, R. (2003). I'm a hypocrite, but so is everyone else: Group support and the reduction of cognitive dissonance. *Group Dynamics: Theory, Research, and Practice*, *7*, 214–224. https://doi.org/10.1037/1089-2699.7.3.214

McNair, D. M., Lorr, M., & Droppleman, L. F. (1971). *Profiles of mood states*. San Diego: Educational and Industrial Testing Services.

Meade, A. W., & Bauer, D. J. (2007). Power and Precision in Confirmatory Factor Analytic Tests of Measurement Invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, *14*(4), 611–635. https://doi.org/10.1080/10705510701575461

Meetoo, V. (2018). Negotiating the diversity of 'everyday' multiculturalism: teachers' enactments in an inner city secondary school. *Race Ethnicity and Education*, *0*, 1–19. https://doi.org/10.1080/13613324.2018.1497962

Meeus, W. (2016). Adolescent psychosocial development: A review of longitudinal models and research. *Developmental Psychology*, *52*, 1969–1993. https://doi.org/10.1037/dev0000243

Mesman, J., Van IJzendoorn, M. H., & Sagi-schwartz, A. (2016). Cross-Cultural Patterns of Attachment Universal and Contextual Dimensions. In *Handbook of Attachment: Theory, Research, and Clinical Applications,* (third, pp. 790–815). New York, NY: Guilford.

Miklikowska, M., Thijs, J., & Hjerm, M. (2019). The impact of perceived teacher support on anti-immigrant attitudes from early to late adolescence. *Journal of Youth and Adolescence*, 1175–1189. https://doi.org/10.1007/s10964-019-00990-8

Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology*, *81*(1), 97–115. https://doi.org/10.1037//0022-3514.81.1.97

Mikulincer, M., & Shaver, P. R. (2007). Boosting Attachment Security to Promote Mental Health, Prosocial Values, and Inter-Group Tolerance. *Psychological Inquiry*, *18*, 139–156. https://doi.org/10.1080/10478400701512646

Mikulincer, M., Shaver, P. R., Gillath, O., & Nitzberg, R. A. (2005). Attachment, caregiving, and

altruism: boosting attachment security increases compassion and helping. *Journal of Personality and Social Psychology*, *89*, 817–839. https://doi.org/10.1037/0022-3514.89.5.817

Milyavskaya, M., Gingras, I., Mageau, G. A., Koestner, R., Gagnon, H., Jianqun Fang, & Boiché, J. (2009). Balance Across Contexts: Importance of Balanced Need Satisfaction Across Various Life Domains. *Personality and Social Psychology Bulletin*, *35*(8), 1031–1045. https://doi.org/10.1177/0146167209337036

Mitchell-Copeland, J., Denham, S. A., & Demulder, E. K. (1997). Early Education and Development Q-Sort Assessment of Child – Teacher Attachment Relationships and Social Competence in the Preschool. *Early Education and Development*, *8*, 27–39. https://doi.org/10.1207/s15566935eed0801

Morris-Rothschild, B. K., & Brassard, M. R. (2006). Teachers' conflict management styles: The role of attachment styles and classroom management efficacy. *Journal of School Psychology*. https://doi.org/10.1016/j.jsp.2006.01.004

Munniksma, A., Flache, A., Verkuyten, M., & Veenstra, R. (2012). Parental acceptance of children's intimate ethnic outgroup relations: The role of culture, status, and family reputation. *International Journal of Intercultural Relations*, *36*(4), 575–585. https://doi.org/10.1016/j.ijintrel.2011.12.012

Muthén, L. K., & Muthén, B. O. (2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.

Nesdale, D. (2004). Social identity and ethnic prejudice in children. In M. Bennet & F. Sani (Eds.), *The development of social self* (pp. 219–249). New York, NY: Psychology Press.

Nesdale, D., Durkin, K., Maass, A., Kiesner, J., Griffiths, J., Daly, J., & McKenzie, D. (2010). Peer group rejection and children's outgroup prejudice. *Journal of Applied Developmental Psychology*, *31*(2), 134–144. https://doi.org/10.1016/j.appdev.2009.11.004

Onderwijsinspectie. (2006). *Toezicht op Burgerschap en Integratie*. Rijswijk. Retrieved from http://www.onderwijsinspectie.nl/binaries/content/assets/Actueel_publicaties/2006/Toezicht+burgerschap+en+integratie.pdf

Pettigrew, T. F. (1998). Intergroup contact theory. *Annual Review of Psychology*, *49*, 65–85. https://doi.org/10.1146/annurev.psych.49.1.65

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*, 751–783. https://doi.org/10.1037/0022-3514.90.5.751

Pianta, R. C. (1999). *Enhancing Relationships between Children and Teachers*. Washington, DC: American Psychological Association.

Pianta, R. C. (2001). *STRS: Student-teacher Relationship Scale: professional manual*. Psychological Assessment Resources.

Pianta, R. C. (2017). Teacher-student interactions: Measurement, impacts, improvement, and policy. In *Teachers, Teaching, and Reform* (pp. 75–93). Routledge.

Pianta, R. C., Hamre, B. K., & Stuhlman, M. (2003). Relationships between teachers and children. In W.

M. Reynolds & G. E. Miller (Eds.), *Handbook of Psychology; Vol. 7 Educational Psychology* (pp. 199–234). Hoboken, NJ: John Wiley & Sons, Inc. https://doi.org/10.1002/0471264385.wei0710

Pigott, R. L., & Cowen, E. L. (2000). Teacher Race, Child Race, Racial Congruence, and Teacher Ratings of Children's School Adjustment. *Journal of School Psychology*, *38*, 177–195. https://doi.org/10.1016/S0022-4405(99)00041-2

Plant, E. A., & Devine, P. G. (1998). Internal and External Motivation to Respond Without Prejudice. *Journal of Personality and Social Psychology*, *75*(3), 811–832. https://doi.org//10.1037/t03881-000

Plant, E. A., & Devine, P. G. (2003). The Antecedents and Implications of Interracial Anxiety. *Personality and Social Psychology Bulletin*, *29*, 790–801. https://doi.org/10.1177/0146167203029006011

Plaut, V. C., Garnett, F. G., Buffardi, L. E., & Sanchez-Burks, J. (2011). " What About Me?" Perceptions of exclusion and whites' reactions to multiculturalism. *Journal of Personality and Social Psychology*, *101*, 337–353. https://doi.org/10.1037/a0022832

Podell, D. M., & Soodak, L. C. (1993). Teacher Efficacy and Bias in Special Education Referrals. *The Journal of Educational Research*, *86*(4), 247–253. https://doi.org/10.1080/00220671.1993.9941836

Portes, A., & MacLeod, D. (1999). Educating the second generation: Determinants of academic achievement among children of immigrants in the United States. *Journal of Ethnic and Migration Studies*, *25*(3), 373–396. https://doi.org/10.1080/1369183X.1999.9976693

Quinn, D. M., & Cooc, N. (2015). Science Achievement Gaps by Gender and Race/Ethnicity in Elementary and Middle School: Trends and Predictors. *Educational Researcher*, *44*, 336–346. https://doi.org/10.3102/0013189X15598539

Raabe, T., & Beelmann, A. (2011). Development of ethnic, racial, and national prejudice in childhood and adolescence: a multinational meta-analysis of age differences. *Child Development*, *82*, 1715–1737. https://doi.org/10.1111/j.1467-8624.2011.01668.x

Rattan, A., & Ambady, N. (2013). Diversity ideologies and intergroup relations: An examination of colorblindness and multiculturalism. *European Journal of Social Psychology*, *43*, 12–21. https://doi.org/10.1002/ejsp.1892

Raudenbush, S. W., Rowan, B., & Cheong, Y. F. (1992). Contextual Effects on the Self-perceived Efficacy of High School Teachers. *Sociology of Education*, *65*(2), 150–167. https://doi.org/10.2307/2112680

Rice, M. E., & Grusec, J. E. (1975). Saying and doing: Effects on observer performance. *Journal of Personality and Social Psychology*, *32*, 584. https://doi.org/https://doi.org/10.1037//0022-3514.32.4.584

Richeson, J. A., & Nussbaum, R. J. (2004). The impact of multiculturalism versus color-blindness on racial bias. *Journal of Experimental Social Psychology*, *40*, 417–423. https://doi.org/10.1016/j.jesp.2003.09.002

Riek, B. M., Mania, E. W., & Gaertner, S. L. (2006). Intergroup threat and outgroup attitudes: a meta-analytic review. *Personality and Social Psychology Review*, *10*(4), 336–353. https://doi.org/10.1207/s15327957pspr1004_4

Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. Y. (2017). Affective teacher–student relationships and students' engagement and achievement: A meta-analytic update and test of the mediating role of engagement. *School Psychology Review*, *46*, 239–261. https://doi.org/10.17105/SPR-2017-0035.V46-3

Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, *81*, 493–529. https://doi.org/10.3102/0034654311421793

Ross, J. A. (1992). Teacher Efficacy and the Effects of Coaching on Student Achievement. *Canadian Journal of Education / Revue Canadienne de l'éducation*, *17*, 51. https://doi.org/10.2307/1495395

Ross, J. A., Cousins, J. B., & Gadalla, T. (1996). Within-teacher predictors of teacher efficacy. *Teaching and Teacher Education*, *12*(4), 385–400. https://doi.org/10.1016/0742-051x(95)00046-m

Roux, J. Le. (2001). Social dynamics of the multicultural classroom. *Intercultural Education*, *12*, 273–288. https://doi.org/10.1080/14675980120087480

Rushton, J. P. (1975). Generosity in children: Immediate and long-term effects of modeling, preaching, and moral judgment. *Journal of Personality and Social Psychology*, *31*, 459–466. https://doi.org/10.1037/h0076466

Rutland, A., Brown, R., Cameron, L., Ahmavaara, A., Arnold, K., & Samson, J. (2007). Development of the positive–negative asymmetry effect: in-group exclusion norm as a mediator of children's evaluations on negative attributes. *European Journal of Social Psychology*, *37*, 171–190. https://doi.org/10.1002/ejsp.342

Rutland, A., Cameron, L., Jugert, P., Nigbur, D., Brown, R., Watters, C., … Le Touze, D. (2012). Group identity and peer relations: A longitudinal study of group identity, perceived peer acceptance, and friendships amongst ethnic minority English children. *British Journal of Developmental Psychology*, *30*, 283–302. https://doi.org/10.1111/j.2044-835X.2011.02040.x

Ryan, A. M., Kuusinen, C. M., & Bedoya-Skoog, A. (2015). Managing peer relations: A dimension of teacher self-efficacy that varies between elementary and middle school teachers and is associated with observed classroom quality. *Contemporary Educational Psychology*, *41*, 147–156. https://doi.org/10.1016/j.cedpsych.2015.01.002

Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal*, *38*, 437–460. https://doi.org/https://doi.org/10.3102/00028312038002437

Ryan, R. M., & Deci, E. L. (2000a). Self-determination theory and the facilitation of intrinsic motivation,

social development, and well-being. *American Psychologist*, *55*, 68–78. https://doi.org/10.1037//0003-066X.55.1.68

Ryan, R. M., & Deci, E. L. (2000b). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry*, *11*(4), 319–338. https://doi.org/10.1207/S15327965PLI1104_03

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation development and wellness*. New York, NY: Guilford. https://doi.org/http://dx.doi.org/10.1016/S0278-5846(03)00119-2

Saft, E. W., & Pianta, R. C. (2001). Teachers' perceptions of their relationships with students: Effects of child age, gender, and ethnicity of teachers and children. *School Psychology Quarterly*, *16*(2), 125–141. https://doi.org/10.1521/scpq.16.2.125.18698

Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychological Bulletin*, *140*, 921–948. https://doi.org/10.1037/a0035754

Schmitt, N., & Kuljanin, G. (2008). Human Resource Management Review Measurement invariance : Review of practice and implications ☆. *Human Resource Management Review*, *18*, 210–222. https://doi.org/10.1016/j.hrmr.2008.03.003

Schunk, D. H. (1991). Self-Efficacy and Academic Motivation. *Educational Psychologist*, *26*(3–4), 207–231. https://doi.org/10.1080/00461520.1991.9653133

Schwab, S. (2019). Teachers' student-specific self-efficacy in relation to teacher and student variables. *Educational Psychology*, *39*(1), 4–18. https://doi.org/10.1080/01443410.2018.1516861

Schwarzer, R., & Hallum, S. (2008). Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. *Applied Psychology*, *57*(s1), 152–171. https://doi.org/10.1111/j.1464-0597.2008.00359.x

Schwarzer, R., & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio* (pp. 35–38). Windsor: NFER-Nelson.

Severiens, S., Wolff, R., & van Herpen, S. (2014). Teaching for diversity: a literature overview and an analysis of the curriculum of a teacher training college. *European Journal of Teacher Education*, *37*(3), 295–311. https://doi.org/10.1080/02619768.2013.845166

Siem, B., Stürmer, S., & Pittinsky, T. L. (2016). The Psychological Study of Positive Behavior Across Group Boundaries: An Overview. *Journal of Social Issues*, *72*(3), 419–431. https://doi.org/10.1111/josi.12174

Sierksma, J., Thijs, J., & Verkuyten, M. (2014a). Children's intergroup helping: The role of empathy and peer group norms. *Journal of Experimental Child Psychology*, *126*, 369–383. https://doi.org/10.1016/j.jecp.2014.06.002

Sierksma, J., Thijs, J., & Verkuyten, M. (2014b). Ethnic helping and group identity: A study among

majority group children. *Social Development*, *23*, 803–819. https://doi.org/10.1111/sode.12077

Siwatu, K. O. (2007). Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs. *Teaching and Teacher Education*, *23*(7), 1086–1101. https://doi.org/10.1016/j.tate.2006.07.011

Siwatu, K. O. (2011). Preservice Teachers' Culturally Responsive Teaching Self-Efficacy-Forming Experiences: A Mixed Methods Study. *The Journal of Educational Research*, *104*(5), 360–369. https://doi.org/10.1080/00220671.2010.487081

Siwatu, K. O., & Starker, T. V. (2010). Predicting Preservice Teachers' Self-Efficacy to Resolve a Cultural Conflict Involving an African American Student. *Multicultural Perspectives*. https://doi.org/10.1080/15210961003641302

Skiba, R. J., Michael, R. S., Nardo, A. C., & Peterson, R. L. (2002). The color of discipline: Sources of racial and gender disproportionality in school punishment. *The Urban Review*, *34*(4), 317–342. https://doi.org/10.1023/A:1021320817372

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology*, *85*(4), 571–581. https://doi.org/10.1037//0022-0663.85.4.571

Skinner, E. A., Kindermann, T. A., & Furrer, C. J. (2008). A Motivational Perspective on Engagement and Disaffection: Conceptualization and Assessment of Children's Behavioral and Emotional Participation in Academic Activities in the Classroom. *Educational and Psychological Measurement*, *69*(3), 493–525. https://doi.org/10.1177/0013164408323233

Smith, J. R., & Louis, W. R. (2008). Do as we say and as we do: The interplay of descriptive and injunctive group norms in the attitude-behaviour relationship. *British Journal of Social Psychology*, *47*, 647–666. https://doi.org/10.1348/014466607X269748

Snijders, T. A. B., & Bosker, R. J. (1999). *Multilevel analysis. An introduction to basic and advanced multilevel modeling*. London: Sage.

Solomon, D., Watson, M., Battistich, V., Schaps, E., & Delucchi, K. (1996). Creating classrooms that students experience as communities. *American Journal of Community Psychology*, *24*(6), 719–748. https://doi.org/10.1007/BF02511032

Spilt, J. L., & Hughes, J. N. (2015). African American children at risk of increasingly conflicted teacher–student relationships in elementary school. *School Psychology Review*, *44*(3), 306–314. https://doi.org/10.17105/spr-14-0033.1

Spilt, J. L., Hughes, J. N., Wu, J.-Y., & Kwok, O.-M. (2012). Dynamics of teacher-student relationships: stability and change across elementary school and the influence on children's academic success. *Child Development*, *83*, 1180–1195. https://doi.org/10.1111/j.1467-8624.2012.01761.x

Spilt, J. L., Koomen, H. M. Y., & Thijs, J. (2011). Teacher wellbeing: The importance of teacher–student relationships. *Educational Psychology Review*, *23*, 457–477. https://doi.org/10.1007/s10648-

011-9170-y

Spilt, J. L., Koomen, H. M. Y., Thijs, J., & Van der Leij, A. (2012). Supporting teachers' relationships with disruptive children: the potential of relationship-focused reflection. *Attachment & Human Development*, *14*(3), 305–318. https://doi.org/10.1080/14616734.2012.672286

Stark, T. H., Flache, A., & Veenstra, R. (2013). Generalization of positive and negative attitudes toward individuals to outgroup attitudes. *Personality and Social Psychology Bulletin*, *39*, 608–622. https://doi.org/10.1177/0146167213480890

Staunton, M., Louis, W. R., Smith, J. R., Terry, D. J., & McDonald, R. I. (2014). How negative descriptive norms for healthy eating undermine the effects of positive injunctive norms. *Journal of Applied Social Psychology*, *44*, 319–330. https://doi.org/10.1111/jasp.12223

Stephan, C. W., Renfo, L., & Stephan, W. G. (2004). The evaluation of multicultural education programs: Techniques and a meta-analysis. In W. G. Stephan & W. P. Vogt (Eds.), *Education programs for improving intergroup relations* (pp. 227–242). New York, NY: Teachers College Press.

Stephan, W. G., & Stephan, C. W. (1985). Intergroup Anxiety. *Journal of Social Issues*, *41*(3), 157–175. https://doi.org/10.1111/j.1540-4560.1985.tb01134.x

Stevens, G., Pels, T., Bengi-Arslan, L., Verhulst, F. C., Vollebergh, W. A. M., & Crijnen, A. A. M. (2003). Parent, teacher and self-reported problem behavior in The Netherlands: Comparing Moroccan immigrant with Dutch and with Turkish immigrant children and adolescents. *Social Psychiatry and Psychiatric Epidemiology*, *38*, 576–585. https://doi.org/10.1007/s00127-003-0677-5

Stevens, G., Pels, T. V. M., Vollebergh, W. A. M., & Crijnen, A. A. M. (2004). Patterns of Psychological Acculturation in Adult and Adolescent Moroccan Immigrants Living in the Netherlands. *Journal of Cross-Cultural Psychology*, *35*, 689–704. https://doi.org/10.1177/0022022104270111

Stevens, G., & Vollebergh, W. A. M. (2008). Mental health in migrant children. *Journal of Child Psychology and Psychiatry*, *49*(3), 276–294. https://doi.org/10.1111/j.1469-7610.2007.01848.x

Stevens, P. A. J., Crul, M., Slootman, M. W., Clycq, N., & Timmerman, C. (2019). The Netherlands: From Diversity Celebration to a Colorblind Approach. In P. A. J. Stevens & A. G. Dworkin (Eds.), *The Palgrave Handbook of Race and Ethnic Inequalities in Education* (Second, pp. 783–841). Cham, Switzerland: Springer International Publishing. https://doi.org/10.1007/978-3-319-94724-2_19

Stroet, K., Opdenakker, M.-C., & Minnaert, A. (2013). Effects of need supportive teaching on early adolescents' motivation and engagement: A review of the literature. *Educational Research Review*, *9*, 65–87. https://doi.org/10.1016/j.edurev.2012.11.003

Tajfel, H., & Turner, J. C. (1979). An Integrative Theory of Intergroup Conflict. In W. G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33–47). Monterey, CA: Brooks/Cole.

Tenenbaum, H. R., & Ruck, M. D. (2007). Are teachers' expectations different for racial minority than

for European American students? A meta-analysis. *Journal of Educational Psychology*, *99*(2), 253–273. https://doi.org/10.1037/0022-0663.99.2.253

Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: A role for group identification. *Personality and Social Psychology Bulletin*, *22*(8), 776–793. https://doi.org/10.1177/0146167296228002

Thijs, J., & Fleischmann, F. (2015). Student – teacher relationships and achievement goal orientations : Examining student perceptions in an ethnically diverse sample. *Learning and Individual Differences*, *42*(September), 53–63. https://doi.org/10.1016/j.lindif.2015.08.014

Thijs, J., Gharaei, N., & De Vroome, T. (2016). "Why should I?" Adolescents' motivations to regulate prejudice in relation to their norm perceptions and ethnic attitudes. *International Journal of Intercultural Relations*, *53*, 83–94. https://doi.org/10.1016/j.ijintrel.2016.05.006

Thijs, J., Keim, A. C., & Geerlings, J. (2019). Classroom identification in ethnic minority and majority students: Effects of relationships and ethnic composition. *British Journal of Educational Psychology*, *89*(4), 707–725. https://doi.org/10.1111/bjep.12253

Thijs, J., Koomen, H. M. Y., Roorda, D. L., & Hagen, J. ten. (2011). Journal of Applied Developmental Psychology Explaining teacher – student interactions in early childhood : An interpersonal theoretical approach. *Journal of Applied Developmental Psychology*, *32*(1), 34–43. https://doi.org/10.1016/j.appdev.2010.10.002

Thijs, J., Koomen, H. M. Y., & Van Der Leij, A. (2008). Teacher-child relationships and pedagogical practices: Considering the teacher's perspective. *School Psychology Review*, *37*(2), 244–260.

Thijs, J., & Verkuyten, M. (2012). Ethnic attitudes of minority students and their contact with majority group teachers. *Journal of Applied Developmental Psychology*, *33*, 260–268. https://doi.org/10.1016/j.appdev.2012.05.004

Thijs, J., & Verkuyten, M. (2013). Multiculturalism in the classroom: Ethnic attitudes and classmates' beliefs. *International Journal of Intercultural Relations*, *37*, 176–187. https://doi.org/10.1016/j.ijintrel.2012.04.012

Thijs, J., & Verkuyten, M. (2014). School ethnic diversity and students' interethnic relations. *British Journal of Educational Psychology*, *84*, 1–21. https://doi.org/10.1111/bjep.12032

Thijs, J., & Verkuyten, M. (2016). Ethnic attitudes and social projection in the classroom. *Child Development*, *87*, 1452–1465. https://doi.org/10.1111/cdev.12597

Thijs, J., Westhof, S., & Koomen, H. M. Y. (2012). Ethnic incongruence and the student-teacher relationship: the perspective of ethnic majority teachers. *Journal of School Psychology*, *50*, 257–273. https://doi.org/10.1016/j.jsp.2011.09.004

Tosolt, B. (2010). Gender and race differences in middle school students' perceptions of caring teacher behaviors. *Multicultural Perspectives*, *12*(3), 145–151. https://doi.org/10.1080/15210960.2010.504484

Traag, T. (2018). *Leerkrachten in Het Basisonderwijs*. Den Haag. Retrieved from https://www.cbs.nl/-/media/_pdf/2018/26/2018st15 leerkrachten basisonderwijs (1).pdf

Tropp, L. R., O'Brien, T. C., González Gutierrez, R., Valdenegro, D., Migacheva, K., De Tezanos-Pinto, P., … Cayul, O. (2016). How school norms, peer norms, and discrimination predict interethnic experiences among ethnic minority and majority youth. *Child Development*, *87*, 1436–1451. https://doi.org/10.1111/cdev.12608

Tropp, L. R., O'Brien, T. C., & Migacheva, K. (2014). How peer norms of inclusion and exclusion predict children's interest in cross-ethnic friendships. *Journal of Social Issues*, *70*, 151–166. https://doi.org/10.1111/josi.12052

Tropp, L. R., & Pettigrew, T. F. (2005). Relationships between integroup contact and prejudice among minority and majority groups. *Psychological Science*, *16*, 951–957. https://doi.org/10.1111/j.1467-9280.2005.01643.x

Tropp, L. R., & Prenovost, M. (2008). The role of intergroup contact in predicting interethnic attitudes: Evidence from meta-analytic and field studies. In S. R. Levy & M. Killen (Eds.), *Intergroup attitudes and relations in childhood through adulthood* (pp. 236–248). Oxford, UK: Oxford University Press.

Tschannen-Moran, M., Hoy, A. W., & Woolfolk Hoy, A. (2007). The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*, *23*(6), 944–956. https://doi.org/10.1016/j.tate.2006.05.003

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: capturing an elusive construct. *Teaching and Teacher Education*, *17*(7), 783–805. https://doi.org/10.1016/S0742-051X(01)00036-1

Tschannen-Moran, M., & McMaster, P. (2009). Sources of Self-Efficacy: Four Professional Development Formats and Their Relationship to Self-Efficacy and Implementation of a New Teaching Strategy. *The Elementary School Journal*, *110*, 228–245. https://doi.org/10.1086/605771

Tsouloupas, C. N., Carson, R. L., Matthews, R. A., Grawitch, M. J., & Barber, L. K. (2010). Exploring the association between teachers' perceived student misbehaviour and emotional exhaustion: the importance of teacher efficacy beliefs and emotion regulation. *Educational Psychology*, *30*(2), 173–189. https://doi.org/10.1080/01443410903494460

Tucker, C. M., Porter, T., Reinke, W. M., Herman, K. C., Ivery, P. D., Mack, C. E., & Jackson, E. S. (2005). Promoting Teacher Efficacy for Working With Culturally Diverse Students. *Preventing School Failure: Alternative Education for Children and Youth*, *50*(1), 29–34. https://doi.org/10.3200/PSFL.50.1.29-34

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). A self-categorization theory. In J. C. Turner, M. A. Hogg, P. J. Oakes, S. D. Reicher, & M. S. Wetherell (Eds.), *Rediscovering the Social Group: a Self-Categorization Theory* (pp. 42–64). Oxford, UK: Blackwell.

Turner, J. C., & Reynolds, K. J. (2001). The social identity perspective in intergroup relations: Theories, themes, and controversies. In R. Brown & S. L. Gaertner (Eds.), *The Blackwell handbook of social*

psychology: Intergroup Processes (pp. 133–152). Malden, MA: Blackwell.

Turner, R. N., Hewstone, M., & Voci, A. (2007). Reducing explicit and implicit outgroup prejudice via direct and extended contact: The mediating role of self-disclosure and intergroup anxiety. *Journal of Personality and Social Psychology*, *93*, 369–388. https://doi.org/10.1037/0022-3514.93.3.369

Ülger, Z., Dette-Hagenmeyer, D. E., Reichle, B., & Gaertner, S. L. (2018). Improving outgroup attitudes in schools: A meta-analytic review. *Journal of School Psychology*, *67*, 88–103. https://doi.org/10.1016/j.jsp.2017.10.002

Van de Werfhorst, H. G., & Van Tubergen, F. (2007). Ethnicity, schooling, and merit in the Netherlands. *Ethnicities*, *7*(3), 416–444.

Van den Bergh, L., Denessen, E., Hornstra, L., Voeten, M., & Holland, R. W. (2010). The Implicit Prejudiced Attitudes of Teachers: Relations to Teacher Expectations and the Ethnic Achievement Gap. *American Educational Research Journal*, *47*, 497–527. https://doi.org/10.3102/0002831209353594

Van der Zee, K. I., Van Oudenhoven, J. P., & De Grijs, E. (2004). Personality, threat, and cognitive and emotional reactions to stressful intercultural situations. *Journal of Personality*, *72*(October 2004), 1069–1096. https://doi.org/10.1111/j.0022-3506.2004.00290.x

Van Ewijk, R., & Sleegers, P. (2010). The effect of peer socioeconomic status on student achievement: A meta-analysis. *Educational Research Review*, *5*(2), 134–150. https://doi.org/10.1016/j.edurev.2010.02.001

Verkuyten, M. (2002). Ethnic attitudes among minority and majority children: The role of ethnic identification, peer group victimization and parents. *Social Development*, *11*, 558–570. https://doi.org/10.1111/1467-9507.00215

Verkuyten, M. (2005). *The social psychology of ethnic identity*. New York, NY: Psychology Press.

Verkuyten, M., & Martinovic, B. (2006). Understanding multicultural attitudes: The role of group status, identification, friendships, and justifying ideologies. *International Journal of Intercultural Relations*, *30*, 1–18. https://doi.org/10.1016/j.ijintrel.2005.05.015

Verkuyten, M., & Thijs, J. (2001). Ethnic and gender bias among Dutch and Turkish children in late childhood: The role of social context. *Infant and Child Development*, *10*(4), 203–217. https://doi.org/10.1002/icd.279

Verkuyten, M., & Thijs, J. (2002). Racist victimization among children in The Netherlands: the effect of ethnic group and school. *Ethnic and Racial Studies*, *25*, 310–331. https://doi.org/10.1080/01419870120109502

Verkuyten, M., & Thijs, J. (2010). Ethnic Minority Labeling, Multiculturalism, and the Attitude of Majority Group Members. *Journal of Language and Social Psychology*, *29*(4), 467–477. https://doi.org/10.1177/0261927X10377992

Verkuyten, M., & Thijs, J. (2013). Multicultural education and inter-ethnic attitudes. *European Psychologist*,

18, 179–190. https://doi.org/10.1027/1016-9040/a000152

Verschueren, K., Doumen, S., & Buyse, E. (2012). Relationships with mother, teacher, and peers: Unique and joint effects on young children's self-concept. *Attachment and Human Development*, *14*, 233–248. https://doi.org/10.1080/14616734.2012.672263

Verschueren, K., & Koomen, H. M. Y. (2012). Teacher-child relationships from an attachment perspective. *Attachment & Human Development*, *14*, 205–211. https://doi.org/10.1080/14616734.2012.672260

Vervaet, R., Van Houtte, M., & Stevens, P. A. J. (2018). Multicultural teaching in Flemish secondary schools: The role of ethnic school composition, track, and teachers' ethnic prejudice. *Education and Urban Society*, *50*, 274–299. https://doi.org/10.1177/0013124517704290

Vezzali, L., Giovannini, D., & Capozza, D. (2012). Social antecedents of children's implicit prejudice: Direct contact, extended contact, explicit and implicit teachers' prejudice. *European Journal of Developmental Psychology*, *9*, 569–581. https://doi.org/10.1080/17405629.2011.631298

Voci, A., & Hewstone, M. (2003). Intergroup Contact and Prejudice Toward Immigrants in Italy: The Mediational Role of Anxiety and the Moderational Role of Group Salience. *Group Processes & Intergroup Relations*, *6*, 37–54. https://doi.org/10.1177/1368430203006001011

Vollebergh, W. A. M., Ten Have, M., Dekovic, M., Oosterwegel, A., Pels, T., Veenstra, R., … Verhulst, F. (2005). Mental health in immigrant children in the Netherlands. *Social Psychiatry and Psychiatric Epidemiology*, *40*, 489–496. https://doi.org/10.1007/s00127-005-0906-1

Walden, T. A., & Ogan, T. A. (1988). The development of social referencing. *Child Development*, *59*, 1230–1240. https://doi.org/10.1111/1467-8624.ep8589352

Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers : Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education*, *47*, 120–130. https://doi.org/10.1016/j.tate.2014.12.005

Weinfield, N. S., Sroufe, L. A., Egeland, B., & Carlson, E. A. (2008). The nature of individual differences in infant-caregiver attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of Attachment: Theory, Reseach and Clinical Applications* (2nd ed., pp. 78–101). New York, NY: The Guildford Press.

Wellborn, J. G., & Connell, J. P. (1987). *Manual for the Rochester Assessment Package for Schools*. Rochester, NY: University of Rochester.

Wentzel, K. R., Russell, S., & Baker, S. (2016). Emotional Support and Expectations From Parents , Teachers , and Peers Predict Adolescent Competence at School. *Journal of Educational Psychology*, *108*(2), 242–255. https://doi.org/10.1037/edu0000049

Wilder, D. A. (1990). Some determinants of the persuasive power of in-groups and out-groups: Organization of information and attribution of independence. *Journal of Personality and Social Psychology*, *59*, 1202. https://doi.org/10.1037/0022-3514.71.6.1222

Woolfolk Hoy, A., & Burke Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: A comparison of four measures. *Teaching and Teacher Education*, *21*(4), 343–356. https://doi.org/10.1016/j.tate.2005.01.007

Wright, S. C., Aron, A., McLaughlin-Volpe, T., Ropp, S. A., Houssaye, D. De, Gordon, L., … Williams, J. (1997). The extended contact effect: Knowledge of cross-group friendships and prejudice. *Interpersonal Relations and Group Processes*, *73*, 73–90. https://doi.org/https://doi.org/10.1037/0022-3514.73.1.73

Wu, J.-Y., Hughes, J. N., & Kwok, O.-M. (2010). Teacher–student relationship quality type in elementary grades: Effects on trajectories for achievement and engagement. *Journal of School Psychology*, *48*, 357–387. https://doi.org/10.1016/j.jsp.2010.06.004

Wubbels, T., Den Brok, P., Veldman, I., & Van Tartwijk, J. (2006). Teacher interpersonal competence for Dutch secondary multicultural classrooms. *Teachers and Teaching: Theory and Practice*. https://doi.org/10.1080/13450600600644269

Yee, M. D., & Brown, R. (1992). Self-evaluations and intergroup attitudes in children aged three to nine. *Child Development*, *63*, 619–629. https://doi.org/10.1111/1467-8624.ep9207061034

Yoon, J. S. (2002). Teacher characteristics as predictors of teacher-student relationships: Stress, negative affect, and self-efficacy. *Social Behavior and Personality: An International Journal*, *30*, 485–493. https://doi.org/10.2224/sbp.2002.30.5.485

Zajac, K., & Kobak, R. (2006). Attachment. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 379–390). Washington, DC: National Association of School Psychologists.

Zee, M., de Jong, P. F., & Koomen, H. M. Y. (2015). Students' disruptive behavior and the developement of teachers' self-efficacy: The role of teacher-perceived closeness and conflict in the student-teacher relationship. *Submitted*.

Zee, M., De Jong, P. F., & Koomen, H. M. Y. (2016). Teachers' self-efficacy in relation to individual students with a variety of social–emotional behaviors: A multilevel investigation. *Journal of Educational Psychology*, *108*, 1013–1027. https://doi.org/10.1037/edu0000106

Zee, M., De Jong, P. F., & Koomen, H. M. Y. (2017). From externalizing student behavior to student-specific teacher self-efficacy: The role of teacher-perceived conflict and closeness in the student–teacher relationship. *Contemporary Educational Psychology*, *51*, 37–50. https://doi.org/10.1016/j.cedpsych.2017.06.009

Zee, M., & Koomen, H. M. Y. (2016). Teacher Self-Efficacy and Its Effects on Classroom Processes, Student Academic Adjustment, and Teacher Well-Being: A Synthesis of 40 Years of Research. *Review of Educational Research*, 1–35. https://doi.org/10.3102/0034654315626801

Zee, M., & Koomen, H. M. Y. (2017). Similarities and dissimilarities between teachers' and students' relationship views in upper elementary school: The role of personal teacher and student

attributes. *Journal of School Psychology*, *64*, 43–60. https://doi.org/10.1016/j.jsp.2017.04.007

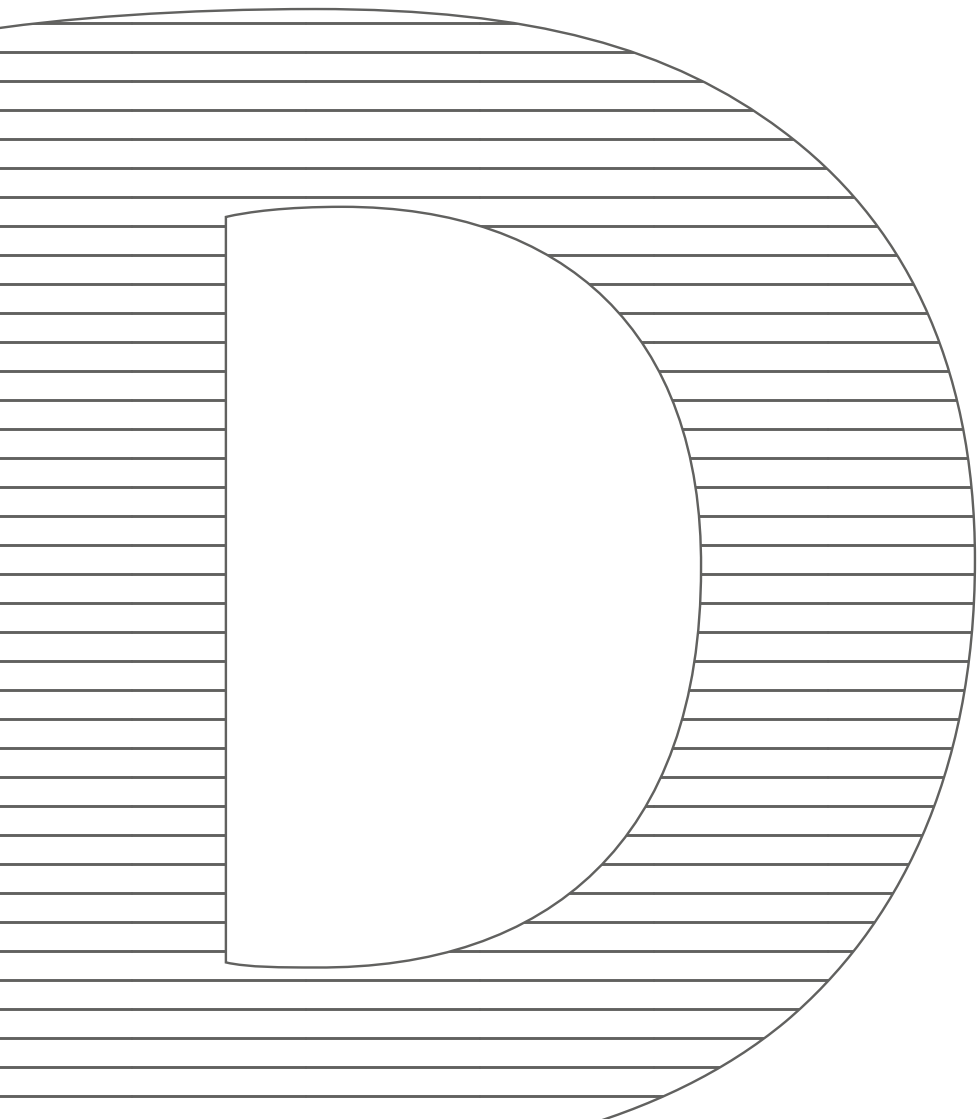
Zee, M., Koomen, H. M. Y., & De Jong, P. F. (2018). How different levels of conceptualization and measurement affect the relationship between teacher self-efficacy and students' academic achievement. *Contemporary Educational Psychology*. https://doi.org/10.1016/j.cedpsych.2018.09.006

Zee, M., Koomen, H. M. Y., Jellesma, F. C., Geerlings, J., & De Jong, P. F. (2016). Inter- and intra-individual differences in teachers' self-efficacy: A multilevel factor exploration. *Journal of School Psychology*, *55*, 39–56. https://doi.org/10.1016/j.jsp.2015.12.003

Zimmerman, R. S., Khoury, E. L., Vega, W. A., Gil, A. G., & Warheit, G. J. (1995). Teacher and parent perceptions of behavior problems among a sample of African American, Hispanic, and non-Hispanic white studients. *American Journal of Community Psychology*, *23*(2), 181–197. https://doi.org/10.1007/BF02506935

Zinga, D. M., & Gordon, M. K. (2016). "Racism under the radar": Student perceptions of school experiences in a multicultural context. *Race Ethnicity and Education*, *19*, 1088–1116. https://doi.org/10.1080/13613324.2014.885429

Zwirs, B. W. C., Burger, H., Schulpen, T. W. J., Wiznitzer, M., Fedder, H., & Buitelaar, J. K. (2007). Prevalence of psychiatric disorders among children of different ethnic origin. *Journal of Abnormal Child Psychology*, *35*, 556–566. https://doi.org/10.1007/s10802-007-9112-9



Dankwoord

Nog als de dag van gisteren herinner ik me het moment dat mijn leraar van groep 7 mij vroeg om na de les nog even te blijven. Iedereen had de uitslag van de Entree-toets in een envelopje mee naar huis gekregen om daar samen met papa en mama open met maken. Maar hij wilde dat graag samen met mij doen. Ik was niet het meest zelfverzekerde kind in de klas, beetje timide, soms wat teruggetrokken. Juist daarom wilde hij me laten zien hoe goed ik de test had gemaakt en me op het hart drukken dat ik daar trots op mocht zijn. Ik heb veel aan dit moment gedacht tijdens het schrijven van dit proefschrift. Keer op keer laat onderzoek, waaronder in dit proefschrift, zien hoe belangrijk het is om een goede band te hebben met je leerkracht, om je ondersteund te voelen, je echt gezien te voelen. En hoewel ik altijd al veel waardering had voor onderwijzers, is die waardering alleen maar gegroeid gedurende mijn onderzoek.

Dit proefschrift had, zoals veel wetenschappelijk onderzoek, niet bestaan zonder de uitzonderlijke inzet van participanten. Ik ben daarom veel dank verschuldigd aan de schooldirecteuren die voldoende interessants zagen in mijn onderzoeksvragen om hun team te vragen deel te nemen. Meer nog wil ik de deelnemende leerkrachten bedanken voor hun inzet voor dit onderzoek; het invullen van de vragenlijsten was geen kleine opgave, en ik ben ontzettend dankbaar dat zij ondanks hun drukke bezigheden binnen en buiten de klas, toch de tijd hebben genomen om meermaals alle vragen in te zullen. De gesprekken met leerkrachten in de koffiekamers, in coachingsgesprekken en in de wandelgangen zijn voor mij bovendien van onschatbare waarde gebleken. Deze gesprekken gaven kleur aan de patronen die ik op basis van mijn onderzoeksresultaten misschien alleen in zwart-wit kon schetsen. En ook de leerlingen wil ik danken voor hun deelname en openhartigheid.

Voor de nodige wetenschappelijke ondersteuning kon ik zelf altijd bij mijn begeleiders Jochem Thijs en Maykel Verkuyten terecht. Ik heb vooral genoten van de discussies met ons drieën over hoe we bepaalde bevindingen nu wel of niet moesten duiden; wat betekent dit nou echt? Daar waar Jochem er altijd was om me met creatieve ideeën uit te dagen om na te denken over andere verklaringen, was er Maykel om mijn neiging om dingen te ingewikkeld te maken te beteugelen. In de afgelopen jaren hebben jullie me geleerd de balans te vinden tussen complexe

onderzoeksmethoden en het verhaal dat je ermee kan vertellen, en om niet vast te blijven houden aan een aanpak die niet werkt. Een zeer waardevolle les die ik hoop in de rest van mijn loopbaan te kunnen meenemen. Mijn grote dank daarvoor!

Ik wil ook de collega´s in Amsterdam, Marjolein Zee en Helma Koomen, heel erg bedanken voor de samenwerking in ons ´Dealing with Diversity´-project. Vanaf de eerste maand van het project moesten we samen heel hard aan de slag om de dataverzameling op poten te zetten en dat was geen kleine klus. Heel fijn dat we samen konden sparren over de vragenlijsten, de aanpak voor de ethische commissie, en de uitvoer van de dataverzameling. Ik heb veel geleerd van jullie expertise op het gebied van leerkracht-leerlingrelaties en voortvarende aanpak bij de uitvoer van het onderzoek. Ik heb ook met heel veel plezier meegewerkt aan de interventie-studie van het project; de coachingsgesprekken waren voor mij een enorm waardevolle ervaring. Ook veel dank aan alle assistenten die weken aan de telefoon hebben gehangen om scholen bereid te vinden mee te doen, met vragenlijsten langs scholen in alle uithoeken van het land zijn gegaan en urenlang vragenlijsten hebben ingevoerd; Femke, Reini, Carolien, Lisa, Gusta, Jana, Mirre en Eva dank voor jullie uithoudingsvermogen!

I am also indebted to Linda Tropp at the University of Massachutess in Amherst for hosting me for a research internship for five months while collaborating on a paper. I greatly appreciate our discussions of the paper, as well as participating in the group discussions in the graduate seminar on intergroup relations, which profoundly shaped my understanding of intergroup relations in the American context, as well as of racial diversity and diversity teaching in general. And thanks to the fellow PhD's at Amherst (Amy, Dan, Tommy, and Levi) for making me feel right at home at Tobin Hall.

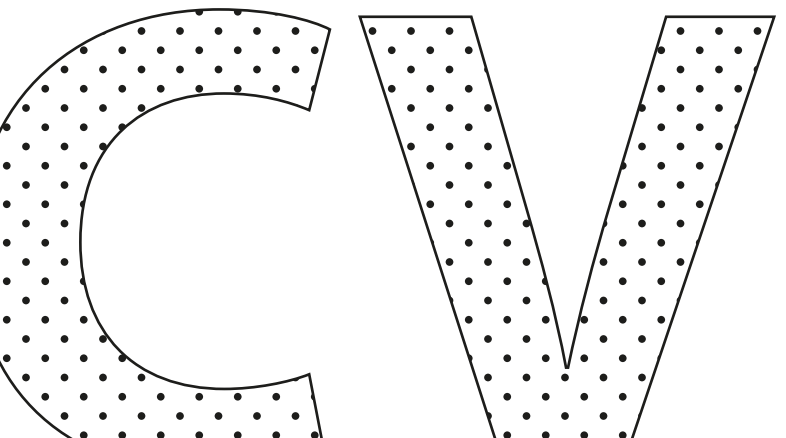
Dank ook aan alle collega´s van Ercomer, het MASS-seminar en het ICS en het die de afgelopen jaren mijn werk van de nodige kritiek en interessante inzichten hebben voorzien. Jullie scherpe vragen hebben ertoe geleidt dat mijn werk hopelijk een stuk inzichtelijker is geworden. Daarnaast waren de lunches met de Ercomer collega's ook heel fijn om te sparren of stoom af te blazen. Dat laatste hebben wellicht vooral mijn kamergenoten Jellie, Menno, Femke, Jolien, Diana, Evi en Saptarshi moeten ontgelden; dank voor jullie luisterend oor en de gezelligheid. My warmest thanks also go out to my fellow ICS 2013 year group PhD's, and to Manja and Yassine, in particular. I really enjoyed our conversations on the trips to Groningen and over

tea or drinks on anything from current political affairs to academia and its societal (ir)relevance. I count myself very lucky to have had you as my fellow AiO's.

Mijn huisgenoten en kameraden in De Grote Broek wil graag ik bedanken voor de nodige afleiding. Het heeft misschien niet geholpen bij het tijdig afronden van dit proefschrift dat ik vaak samen met jullie vrijwillig aan het werk was in onze 'broedplaats van maatschappijkritiek'. Maar het heeft me altijd wel lekker met neus uit de laptop gehouden, en daarmee met een open blik naar wat er nog meer speelt in de wereld. Dank voor jullie heerlijke kookkunsten, discussies aan tafel, en de nodige flauwe grappen.

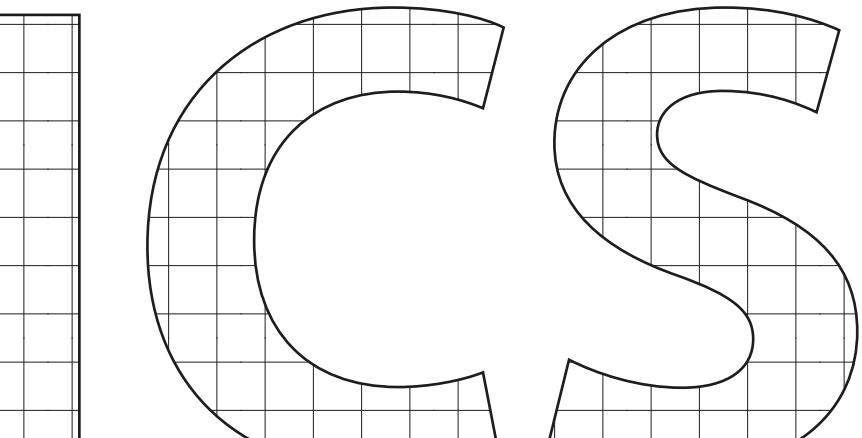
Ik besef me maar al te goed dat ik niet op dit moment in mijn leven had kunnen komen zonder het fijne, liefdevolle nest waarin ik ben opgegroeid. Pap, mam, jullie ondersteuning in alle fasen van mijn leven, zowel materieel als emotioneel, is onmisbaar geweest en heeft me de mogelijkheid gegeven om me in alle vrijheid te ontwikkelen. Ik denk met veel warmte terug aan de avond dat we samen vierden dat ik deze PhD-plek had gekregen, met een spontaan bezoek aan een heel tof concert. Als het weer kan, gaan we deze afsluiting ook zeker samen vieren! Tijn, Niek, als broer en zus hebben jullie me van al mijn goede en minder goede kanten gezien, en toch zijn we een onvoorwaardelijk team. Ik kan me geen fijner cluppie voorstellen. En naast mijn eigen warme nest, heb ik er ook al een jaar of 20 een hele fijne tweede familie bij. Jos, Dimphy, dank voor al jullie steun en ik voel me gezegend met nog zo'n fijne pap en mam erbij.

En dan zijn er nog mijn liefje en mijn lief. Mijn lieve Lex, je hebt de afronding van dit proefschrift misschien wel enigszins vertraagd, maar je bent elke seconde van mijn tijd meer dan waard. Je laat me wereld met andere ogen bekijken en verbaast me iedere dag. Merci dat jij er bent! Thijs, je weet als geen ander dat dit niet vanzelf is gegaan. Dank voor het meedenken, je kalmerende woorden, de schop onder mijn hol, de arm om me heen en de slingers bij mijn succesjes. Ik weet niet of ik er sinds groep 7 beter in ben geworden om soms ook trots op mezelf te zijn, maar ik ben oneindig trots op ons.


CV

Curriculum Vitae

Jolien Geerlings was born in Rosmalen, the Netherlands on 29 Augustus 1985. In 2006 she obtained her Bachelor´s degree in Cultural Anthropology at the Radboud University in Nijmegen. A year later she finished her Master´s degree in the same discipline at Radboud University, specializing in youth and migration in Pacific island societies by conducting fieldwork in the Federated States of Micronesia. Furthering her interest in migration related issues, she completed the Research Master´s program in Migration, Ethnic Relations and Multiculturalism at Utrecht University, cum laude, in 2009, with a thesis on ethnic identity and language use among immigrant youth. During this program she spent two months as an exchange student at Vanderbilt University, Nashville, USA. In 2010 she worked for research institute Movisie, investigating youth homelessness in four European countries. The following year, she started working at the department of Educational Sciences at the University of Twente, in Enschede, the Netherlands, contributing to research on cooperative learning among teachers. Subsequently, in 2014, Jolien started a PhD-position at Interuniversity Centre for Social Science Theory and Methodology (ICS) and the European Research Centre on Migration and Ethnic Relations (Ercomer) at Utrecht University. During this project, she spent 5 months at the University of Massachusetts in Amherst at the department of Psychology of Peace and Violence Program, working with Linda Tropp. Since November 2017, Jolien has been lecturing at the department of Interdisciplinary Social Sciences of Utrecht University, in courses on cross-cultural psychology, migration and integration, and qualitative research methods.



ICS dissertation series

The ICS series presents dissertations of the Interuniversity Center for Social Science Theory and Methodology. Each of these studies aims at integrating explicit theory formation with state of the art empirical research or at the development of advanced methods for empirical research. The ICS was founded in 1986 as a cooperative effort of the universities of Groningen and Utrecht. Since 1992, the ICS expanded to the University of Nijmegen and since 2017 to the University of Amsterdam (UvA). Most of the projects are financed by the participating universities or by the Netherlands Organization for Scientific Research (NWO). The international composition of the ICS graduate students is mirrored in the increasing international orientation of the projects and thus of the ICS series itself.

1. Kees van Liere (1990), *"Lastige Leerlingen. Een empirisch onderzoek naar sociale oorzaken van probleemgedrag op basisscholen."* Amsterdam: Thesis Publishers
2. Marco van Leeuwen (1990), *"Bijstand in Amsterdam, ca. 1800 - 1850. Armenzorg als beheersings en overlevingsstrategie."* ICS-dissertation, Utrecht
3. Ineke Maas (1990), *"Deelname aan podiumkunsten via de podia, de media en actieve beoefening. Substitutie of leereffecten?"* Amsterdam: Thesis Publishers
4. Marjolein Broese van Groenou (1991), *"Gescheiden Netwerken. De relaties met vrienden en verwanten na echtscheiding"* Amsterdam: Thesis Publishers
5. Jan van den Bos (1991), *"Dutch EC Policy Making. A Model Guided Approach to Coordination and Negotiation."* Amsterdam: Thesis Publishers
6. Karin Sanders (1991), *"Vrouwelijke Pioniers. Vrouwen en mannen met een 'mannelijke' hogere beroepsopleiding aan het begin van hun loopbaan."* Amsterdam: Thesis Publishers
7. Sjerp de Vries (1991), *"Egoism, Altruism, and Social Justice. Theory and Experiments on Cooperation in Social Dilemmas."* Amsterdam: Thesis Publishers
8. Ronald Batenburg (1991), *"Automatisering in bedrijf."* Amsterdam: Thesis Publishers
9. Rudi Wielers (1991), *"Selectie en allocatie op de arbeidsmarkt. Een uitwerking voor de informele en geïnstitutionaliseerde kinderopvang."* Amsterdam: Thesis Publishers
10. Gert Westert (1991), *"Verschillen in ziekenhuisgebruik."* ICS-dissertation, Groningen
11. Hanneke Hermsen (1992), *"Votes and Policy Preferences. Equilibria in Party Systems."* Amsterdam: Thesis Publishers
12. Cora Maas (1992), *"Probleemleerlingen in het basisonderwijs"* Amsterdam: Thesis Publis¬hers
13. Ed Boxman (1992), *"Contacten en carrière. Een empirisch theoretisch onderzoek naar de relatie tussen sociale netwerken en arbeidsmarktposities"* Amsterdam: Thesis Publishers
14. Conny Taes (1992), *"Kijken naar banen. Een onderzoek naar de inschatting van arbeidsmarktkansen bij schoolverlaters uit het middelbaar beroepsonderwijs."* Amsterdam: Thesis Publishers
15. Peter van Roozendaal (1992), *"Cabinets in Multi Party Democracies. The Effect of Dominant and Central Parties on Cabinet Composition and Durability."* Amsterdam: Thesis Publishers
16. Marcel van Dam (1992), *"Regio zonder regie. Verschillen in en effectiviteit van gemeentelijk arbeidsmarktbeleid."* Amsterdam: Thesis Publishers
17. Tanja van der Lippe (1993), *"Arbeidsverdeling tussen mannen en vrouwen."* Amsterdam: Thesis Publishers

18. Marc Jacobs (1993), *"Software: Kopen of Kopiëren? Een sociaal wetenschappelijk onderzoek onder PC gebruikers."* Amsterdam: Thesis Publishers
19. Peter van der Meer (1993), *"Verdringing op de Nederlandse arbeidsmarkt. Sector- en sekseverschillen."* Amsterdam: Thesis Publishers
20. Gerbert Kraaykamp (1993), *"Over lezen gesproken. Een studie naar sociale differentiatie in leesgedrag."* Amsterdam: Thesis Publishers
21. Evelien Zeggelink (1993), *"Strangers into Friends. The Evolution of Friendship Networks Using an Individual Oriented Modeling Approach."* Amsterdam: Thesis Publishers
22. Jaco Berveling (1994), *"Het stempel op de besluitvorming. Macht, invloed en besluitvorming op twee Amsterdamse beleidsterreinen."* Amsterdam: Thesis Publishers
23. Wim Bernasco (1994), *"Coupled Careers. The Effects of Spouse's Resources on Success at Work."* Amsterdam: Thesis Publishers
24. Liset van Dijk (1994), *"Choices in Child Care. The Distribution of Child Care Among Mothers, Fathers and Non Parental Care Providers."* Amsterdam: Thesis Publishers
25. Jos de Haan (1994), *"Research Groups in Dutch Sociology."* Amsterdam: Thesis Publishers
26. Kwasi Boahene (1995), *"Innovation Adoption as a Socio Economic Process. The Case of the Ghanaian Cocoa Industry."* Amsterdam: Thesis Publishers
27. Paul Ligthart (1995), *"Solidarity in Economic Transactions. An Experimental Study of Framing Effects in Bargaining and Contracting."* Amsterdam: Thesis Publishers
28. Roger Leenders (1995), *"Structure and Influence. Statistical Models for the Dynamics of Actor Attributes, Network Structure, and their Interdependence."* Amsterdam: Thesis Publishers
29. Beate Volker (1995), *"Should Auld Acquaintance Be Forgot...? Institutions of Communism, the Transition to Capitalism and Personal Networks: the Case of East Germany."* Amsterdam: Thesis Publishers
30. Anneke Cancrinus-Matthijsse (1995), *"Tussen hulpverlening en ondernemerschap. Beroepsuitoefening en taakopvattingen van openbare apothekers in een aantal West Europese landen."* Amsterdam: Thesis Publishers
31. Nardi Steverink (1996), *"Zo lang mogelijk zelfstandig. Naar een verklaring van verschillen in oriëntatie ten aanzien van opname in een verzorgingstehuis onder fysiek kwetsbare ouderen."* Amsterdam: Thesis Publishers
32. Ellen Lindeman (1996), *"Participatie in vrijwilligerswerk."* Amsterdam: Thesis Publishers
33. Chris Snijders (1996), *"Trust and Commitments."* Amsterdam: Thesis Publishers
34. Koos Postma (1996), *"Changing Prejudice in Hungary. A Study on the Collapse of State Socialism and Its Impact on Prejudice Against Gypsies and Jews."* Amsterdam: Thesis Publishers
35. Jooske van Busschbach (1996), *"Uit het oog, uit het hart? Stabiliteit en verandering in persoonlijke relaties."* Amsterdam: Thesis Publishers
36. René Torenvlied (1996), *"Besluiten in uitvoering. Theorieën over beleidsuitvoering modelmatig getoetst op sociale vernieuwing in drie gemeenten."* Amsterdam: Thesis Publishers
37. Andreas Flache (1996), *"The Double Edge of Networks. An Analysis of the Effect of Informal Networks on Cooperation in Social Dilemmas."* Amsterdam: Thesis Publishers
38. Kees van Veen (1997), *"Inside an Internal Labor Market: Formal Rules, Flexibility and Career Lines in a Dutch Manufacturing Company."* Amsterdam: Thesis Publishers
39. Lucienne van Eijk (1997), *"Activity and Well being in the Elderly."* Amsterdam: Thesis Publishers
40. Róbert Gál (1997), *"Unreliability. Contract Discipline and Contract Governance under Economic Transition."* Amsterdam: Thesis Publishers
41. Anne-Geerte van de Goor (1997), *"Effects of Regulation on Disability Duration."* ICS-dissertation, Utrecht

42. Boris Blumberg (1997), *"Das Management von Technologiekooperationen. Partnersuche und Verhandlungen mit dem Partner aus Empirisch Theoretischer Perspektive."* ICS-dissertation, Utrecht
43. Marijke von Bergh (1997), *"Loopbanen van oudere werknemers."* Amsterdam: Thesis Publishers
44. Anna Petra Nieboer (1997), *"Life Events and Well Being: A Prospective Study on Changes in Well Being of Elderly People Due to a Serious Illness Event or Death of the Spouse."* Amsterdam: Thesis Publishers
45. Jacques Niehof (1997), *"Resources and Social Reproduction: The Effects of Cultural and Material Resources on Educational and Occupational Careers in Industrial Nations at the End of the Twentieth Century."* ICS-dissertation, Nijmegen
46. Ariana Need (1997), *"The Kindred Vote. Individual and Family Effects of Social Class and Religion on Electoral Change in the Netherlands, 1956 1994."* ICS-dissertation, Nijmegen
47. Jim Allen (1997), *"Sector Composition and the Effect of Education on Wages: an International Comparison."* Amsterdam: Thesis Publishers
48. Jack Hutten (1998), *"Workload and Provision of Care in General Practice. An Empirical Study of the Relation Between Workload of Dutch General Practitioners and the Content and Quality of their Care."* ICS-dissertation, Utrecht
49. Per Kropp (1998), *"Berufserfolg im Transformationsprozeß. Eine theoretisch empirische Studie über die Gewinner und Verlierer der Wende in Ostdeutschland."* ICS-dissertation, Utrecht
50. Maarten Wolbers (1998), *"Diploma-inflatie en verdringing op de arbeidsmarkt. Een studie naar ontwikkelingen in de opbrengsten van diploma's in Nederland."* ICS-dissertation, Nijmegen
51. Wilma Smeenk (1998), *"Opportunity and Marriage. The Impact of Individual Resources and Marriage Market Structure on First Marriage Timing and Partner Choice in the Netherlands."* ICS-dissertation, Nijmegen
52. Marinus Spreen (1999), *"Sampling Personal Network Structures: Statistical Inference in Ego-Graphs."* ICS-dissertation, Groningen
53. Vincent Buskens (1999), *"Social Networks and Trust."* ICS-dissertation, Utrecht
54. Susanne Rijken (1999), *"Educational Expansion and Status Attainment. A Cross-National and Over-Time Comparison."* ICS-dissertation, Utrecht
55. Mérove Gijsberts (1999), *"The Legitimation of Inequality in State-Socialist and Market Societies, 1987-1996."* ICS-dissertation, Utrecht
56. Gerhard van de Bunt (1999), *"Friends by Choice. An Actor-Oriented Statistical Network Model for Friendship Networks Through Time."* ICS-dissertation, Groningen
57. Robert Thomson (1999), *"The Party Mandate: Election Pledges and Government Actions in the Netherlands, 1986 1998."* Amsterdam: Thela Thesis
58. Corine Baarda (1999), *"Politieke besluiten en boeren beslissingen. Het draagvlak van het mestbeleid tot 2000."* ICS-dissertation, Groningen
59. Rafael Wittek (1999), *"Interdependence and Informal Control in Organizations."* ICS-dissertation, Groningen
60. Diane Payne (1999), *"Policy Making in the European Union: an Analysis of the Impact of the Reform of the Structural Funds in Ireland."* ICS-dissertation, Groningen
61. René Veenstra (1999), *"Leerlingen Klassen Scholen. Prestaties en vorderingen van leerlingen in het voortgezet onderwijs."* Amsterdam, Thela Thesis
62. Marjolein Achterkamp (1999), *"Influence Strategies in Collective Decision Making. A Comparison of Two Models."* ICS-dissertation, Groningen
63. Peter Mühlau (2000), *"The Governance of the Employment Relation. A Relational Signaling Perspective."* ICS-dissertation, Groningen
64. Agnes Akkerman (2000), *"Verdeelde vakbeweging en stakingen. Concurrentie om leden."* ICS-dissertation, Groningen

65. Sandra van Thiel (2000), *"Quangocratization: Trends, Causes and Consequences."* ICS-dissertation, Utrecht
66. Sylvia Peacock-Korupp (2000), *"Mothers and the Process of Social Stratification."* ICS-dissertation, Utrecht
67. Rudi Turksema (2000), *"Supply of Day Care."* ICS-dissertation, Utrecht
68. Bernard Nijstad (2000), *"How the Group Affects the Mind: Effects of Communication in Idea Generating Groups."* ICS-dissertation, Utrecht
69. Inge de Wolf (2000), *"Opleidingsspecialisatie en arbeidsmarktsucces van sociale wetenschappers."* ICS-dissertation, Utrecht
70. Jan Kratzer (2001), *"Communication and Performance: An Empirical Study in Innovation Teams."* ICS-dissertation, Groningen
71. Madelon Kroneman (2001), *"Healthcare Systems and Hospital Bed Use."* ICS/NIVEL-dissertation, Utrecht
72. Herman van de Werfhorst (2001), *"Field of Study and Social Inequality. Four Types of Educational Resources in the Process of Stratification in the Netherlands."* ICS-dissertation, Nijmegen
73. Tamás Bartus (2001), *"Social Capital and Earnings Inequalities. The Role of Informal Job Search in Hungary."* ICS-dissertation Groningen
74. Hester Moerbeek (2001), *"Friends and Foes in the Occupational Career. The Influence of Sweet and Sour Social Capital on the Labour Market."* ICS-dissertation, Nijmegen
75. Marcel van Assen (2001), *"Essays on Actor Perspectives in Exchange Networks and Social Dilemmas."* ICS-dissertation, Groningen
76. Inge Sieben (2001), *"Sibling Similarities and Social Stratification. The Impact of Family Background across Countries and Cohorts."* ICS-dissertation, Nijmegen
77. Alinda van Bruggen (2001), *"Individual Production of Social Well Being. An Exploratory Study."* ICS-dissertation, Groningen
78. Marcel Coenders (2001), *"Nationalistic Attitudes and Ethnic Exclusionism in a Comparative Perspective: An Empirical Study of Attitudes Toward the Country and Ethnic Immigrants in 22 Countries."* ICS-dissertation, Nijmegen
79. Marcel Lubbers (2001), *"Exclusionistic Electorates. Extreme Right Wing Voting in Western Europe."* ICS-dissertation, Nijmegen
80. Uwe Matzat (2001), *"Social Networks and Cooperation in Electronic Communities. A theoretical-empirical Analysis of Academic Communication and Internet Discussion Groups."* ICS-dissertation, Groningen
81. Jacques Janssen (2002), *"Do Opposites Attract Divorce? Dimensions of Mixed Marriage and the Risk of Divorce in the Netherlands."* ICS-dissertation, Nijmegen
82. Miranda Jansen (2002), *"Waardenoriëntaties en partnerrelaties. Een panelstudie naar wederzijdse invloeden."* ICS-dissertation, Utrecht
83. Anne-Rigt Poortman (2002), *"Socioeconomic Causes and Consequences of Divorce."* ICS-dissertation, Utrecht
84. Alexander Gattig (2002), *"Intertemporal Decision Making."* ICS-dissertation, Groningen
85. Gerrit Rooks (2000), *"Contract en Conflict: Strategisch Management van Inkooptransacties."* ICS-dissertation, Utrecht
86. Károly Takács (2002), *"Social Networks and Intergroup Conflict."* ICS-dissertation, Groningen
87. Thomas Gautschi (2002), *"Trust and Exchange, Effects of Temporal Embeddedness and Network Embeddedness on Providing and Dividing a Surplus."* ICS-dissertation, Utrecht
88. Hilde Bras (2002), *"Zeeuwse meiden. Dienen in de levensloop van vrouwen, ca. 1850 – 1950."* Aksant Academic Publishers, Amsterdam
89. Merijn Rengers (2002), *"Economic Lives of Artists. Studies into Careers and the Labour Market in the Cultural Sector."* ICS-dissertation, Utrecht

90. Annelies Kassenberg (2002), *"Wat scholieren bindt. Sociale gemeenschap in scholen."* ICS-dissertation, Groningen
91. Marc Verboord (2003), *"Moet de meester dalen of de leerling klimmen? De invloed van literatuuronderwijs en ouders op het lezen van boeken tussen 1975 en 2000."* ICS-dissertation, Utrecht
92. Marcel van Egmond (2003), *"Rain Falls on All of Us (but Some Manage to Get More Wet than Others): Political Context and Electoral Participation."* ICS-dissertation, Nijmegen
93. Justine Horgan (2003), *"High Performance Human Resource Management in Ireland and the Netherlands: Adoption and Effectiveness."* ICS-dissertation, Groningen
94. Corine Hoeben (2003), *"LETS' Be a Community. Community in Local Exchange Trading Systems."* ICS-dissertation, Groningen
95. Christian Steglich (2003), *"The Framing of Decision Situations. Automatic Goal Selection and Rational Goal Pursuit."* ICS-dissertation, Groningen
96. Johan van Wilsem (2003), *"Crime and Context. The Impact of Individual, Neighborhood, City and Country Characteristics on Victimization."* ICS-dissertation, Nijmegen
97. Christiaan Monden (2003), *"Education, Inequality and Health. The Impact of Partners and Life Course."* ICS-dissertation, Nijmegen
98. Evelyn Hello (2003), *"Educational Attainment and Ethnic Attitudes. How to Explain their Relationship."* ICS-dissertation, Nijmegen
99. Marnix Croes en Peter Tammes (2004). *Gif laten wij niet voortbestaan. Een onderzoek naar de overlevingskansen van joden in de Nederlandse gemeenten, 1940-1945*. Aksant Academic Publishers, Amsterdam.
100. Ineke Nagel (2004), *"Cultuurdeelname in de levensloop."* ICS-dissertation, Utrecht
101. Marieke van der Wal (2004), *"Competencies to Participate in Life. Measurement and the Impact of School."* ICS-dissertation, Groningen
102. Vivian Meertens (2004), *"Depressive Symptoms in the General Population: a Multifactorial Social Approach."* ICS-dissertation, Nijmegen
103. Hanneke Schuurmans (2004), *"Promoting Well-Being in Frail Elderly People. Theory and Intervention."* ICS-dissertation, Groningen
104. Javier Arregui Moreno (2004), *"Negotiation in Legislative Decision-Making in the European Union."* ICS-dissertation, Groningen
105. Tamar Fischer (2004), *"Parental Divorce, Conflict and Resources. The Effects on Children's Behaviour Problems, Socioeconomic Attainment, and Transitions in the Demographic Career."* ICS-dissertation, Nijmegen
106. René Bekkers (2004), *"Giving and Volunteering in the Netherlands: Sociological and Psychological Perspectives."* ICS-dissertation, Utrecht
107 Renée van der Hulst (2004), *"Gender Differences in Workplace Authority: An Empirical Study on Social Networks."* ICS-dissertation, Groningen
108. Rita Smaniotto (2004), *"'You Scratch My Back and I Scratch Yours' Versus 'Love Thy Neighbour'. Two Proximate Mechanisms of Reciprocal Altruism."* ICS-dissertation, Groningen
109. Maurice Gesthuizen (2004), *"The Life-Course of the Low-Educated in the Netherlands: Social and Economic Risks."* ICS-dissertation, Nijmegen
110. Carlijne Philips (2005), *"Vakantiegemeenschappen. Kwalitatief en Kwantitatief Onderzoek naar Gelegenheid en Refreshergemeenschap tijdens de Vakantie."* ICS-dissertation, Groningen
111. Esther de Ruijter (2005), *"Household Outsourcing."* ICS-dissertation, Utrecht
112. Frank van Tubergen (2005), *"The Integration of Immigrants in Cross-National Perspective: Origin, Destination, and Community Effects."* ICS-dissertation, Utrecht
113. Ferry Koster (2005), *"For the Time Being. Accounting for Inconclusive Findings Concerning the Effects of Temporary Employment Relationships on Solidary Behavior of Employees."* ICS-dissertation, Groningen

114. Carolien Klein Haarhuis (2005), *"Promoting Anti-Corruption Reforms. Evaluating the Implementation of a World Bank Anti-Corruption Program in Seven African Countries (1999-2001)."* ICS-dissertation, Utrecht
115. Martin van der Gaag (2005), *"Measurement of Individual Social Capital."* ICS-dissertation, Groningen
116. Johan Hansen (2005), *"Shaping Careers of Men and Women in Organizational Contexts."* ICS-dissertation, Utrecht
117. Davide Barrera (2005), *"Trust in Embedded Settings."* ICS-dissertation, Utrecht
118. Mattijs Lambooij (2005), *"Promoting Cooperation. Studies into the Effects of Long-Term and Short-Term Rewards on Cooperation of Employees."* ICS-dissertation, Utrecht
119. Lotte Vermeij (2006), *"What's Cooking? Cultural Boundaries among Dutch Teenagers of Different Ethnic Origins in the Context of School."* ICS-dissertation, Utrecht
120. Mathilde Strating (2006), *"Facing the Challenge of Rheumatoid Arthritis. A 13-year Prospective Study among Patients and Cross-Sectional Study among Their Partners."* ICS-dissertation, Groningen
121. Jannes de Vries (2006), *"Measurement Error in Family Background Variables: The Bias in the Intergenerational Transmission of Status, Cultural Consumption, Party Preference, and Religiosity."* ICS-dissertation, Nijmegen
122. Stefan Thau (2006), *"Workplace Deviance: Four Studies on Employee Motives and Self-Regulation."* ICS-dissertation, Groningen
123. Mirjam Plantinga (2006), *"Employee Motivation and Employee Performance in Child Care. The effects of the Introduction of Market Forces on Employees in the Dutch Child-Care Sector."* ICS-dissertation, Groningen
124. Helga de Valk (2006), *"Pathways into Adulthood. A Comparative Study on Family Life Transitions among Migrant and Dutch Youth."* ICS-dissertation, Utrecht
125. Henrike Elzen (2006), *"Self-Management for Chronically Ill Older People."* ICS-Dissertation, Groningen
126. Ayse Güveli (2007), *"New Social Classes within the Service Class in the Netherlands and Britain. Adjusting the EGP Class Schema for the Technocrats and the Social and Cultural Specialists."* ICS-dissertation, Nijmegen
127. Willem-Jan Verhoeven (2007), *"Income Attainment in Post-Communist Societies."* ICS-dissertation, Utrecht
128. Marieke Voorpostel (2007), *"Sibling support: The Exchange of Help among Brothers and Sisters in the Netherlands."* ICS-dissertation, Utrecht
129. Jacob Dijkstra (2007), *"The Effects of Externalities on Partner Choice and Payoffs in Exchange Networks."* ICS-dissertation, Groningen
130. Patricia van Echtelt (2007), *"Time-Greedy Employment Relationships: Four Studies on the Time Claims of Post-Fordist Work."* ICS-dissertation, Groningen
131. Sonja Vogt (2007), *"Heterogeneity in Social Dilemmas: The Case of Social Support."* ICS-dissertation, Utrecht
132. Michael Schweinberger (2007), *"Statistical Methods for Studying the Evolution of Networks and Behavior."* ICS-dissertation, Groningen
133. István Henrik Back (2007), *"Commitment and Evolution: Connecting Emotion and Reason in Long-term Relationships."* ICS-dissertation, Groningen
134. Ruben van Gaalen (2007), *"Solidarity and Ambivalence in Parent-Child Relationships."* ICS-dissertation, Utrecht
135. Jan Reitsma (2007), *"Religiosity and Solidarity – Dimensions and Relationships Disentangled and Tested."* ICS-dissertation, Nijmegen
136. Jan Kornelis Dijkstra (2007), *"Status and Affection among (Pre)Adolescents and Their Relation with Antisocial and Prosocial Behavior."* ICS-dissertation, Groningen

137. Wouter van Gils (2007), *"Full-time Working Couples in the Netherlands. Causes and Consequences."* ICS-dissertation, Nijmegen
138. Djamila Schans (2007), *"Ethnic Diversity in Intergenerational Solidarity."* ICS-dissertation, Utrecht
139. Ruud van der Meulen (2007), *"Brug over Woelig Water: Lidmaatschap van Sportverenigingen, Vriendschappen, Kennissenkringen en Veralgemeend Vertrouwen."* ICS-dissertation, Nijmegen
140. Andrea Knecht (2008), *"Friendship Selection and Friends' Influence. Dynamics of Networks and Actor Attributes in Early Adolescence."* ICS-dissertation, Utrecht
141. Ingrid Doorten (2008), *"The Division of Unpaid Work in the Household: A Stubborn Pattern?"* ICS-dissertation, Utrecht
142. Stijn Ruiter (2008), *"Association in Context and Association as Context: Causes and Consequences of Voluntary Association Involvement."* ICS-dissertation, Nijmegen
143. Janneke Joly (2008), *"People on Our Minds: When Humanized Contexts Activate Social Norms."* ICS-dissertation, Groningen
144. Margreet Frieling (2008), *"'Joint production' als motor voor actief burgerschap in de buurt."* ICS-dissertation, Groningen
145. Ellen Verbakel (2008), *"The Partner as Resource or Restriction? Labour Market Careers of Husbands and Wives and the Consequences for Inequality Between Couples."* ICS-dissertation, Nijmegen
146. Gijs van Houten (2008), *"Beleidsuitvoering in gelaagde stelsels. De doorwerking van aanbevelingen van de Stichting van de Arbeid in het CAO-overleg."* ICS-dissertation, Utrecht
147. Eva Jaspers (2008), *"Intolerance over Time. Macro and Micro Level Questions on Attitudes Towards Euthanasia, Homosexuality and Ethnic Minorities."* ICS-dissertation, Nijmegen
148. Gijs Weijters (2008), *"Youth Delinquency in Dutch Cities and Schools: A Multilevel Approach."* ICS-dissertation, Nijmegen
149. Jessica Nooij (2009), *"The Self in Social Rejection."* ICS-dissertation, Groningen
150. Gerald Mollenhorst (2009), *"Networks in Contexts. How Meeting Opportunities Affect Personal Relationships."* ICS-dissertation, Utrecht
151. Tom van der Meer (2009), *"States of Freely Associating Citizens: Comparative Studies into the Impact of State Institutions on Social, Civic and Political Participation."* ICS-dissertation, Nijmegen
152. Manuela Vieth (2009), *"Commitments and Reciprocity in Trust Situations. Experimental Studies on Obligation, Indignation, and Self-Consistency."* ICS-dissertation, Utrecht
153. Rense Corten (2009), *"Co-evolution of Social Networks and Behavior in Social Dilemmas: Theoretical and Empirical Perspectives."* ICS-dissertation, Utrecht
154. Arieke Rijken (2009), *"Happy Families, High Fertility? Childbearing Choices in the Context of Family and Partner Relationships."* ICS-dissertation, Utrecht
155. Jochem Tolsma (2009), *"Ethnic Hostility among Ethnic Majority and Minority Groups in the Netherlands. An Investigation into the Impact of Social Mobility Experiences, the Local Living Environment and Educational Attainment on Ethnic Hostility."* ICS-dissertation, Nijmegen
156. Freek Bucx (2009), *"Linked Lives: Young Adults' Life Course and Relations With Parents."* ICS-dissertation, Utrecht
157. Philip Wotschack (2009), *"Household Governance and Time Allocation. Four studies on the combination of work and care."* ICS-dissertation, Groningen
158. Nienke Moor (2009), *"Explaining Worldwide Religious Diversity. The Relationship between Subsistence Technologies and Ideas about the Unknown in Pre-industrial and (Post-)industrial Societies."* ICS-dissertation, Nijmegen
159. Lieke ten Brummelhuis (2009), *"Family Matters at Work. Depleting and Enriching Effects of Employees' Family lives on Work Outcomes."* ICS-dissertation, Utrecht
160. Renske Keizer (2010), *"Remaining Childless. Causes and Consequences from a Life Course Perspective."* ICS-dissertation, Utrecht

161. Miranda Sentse (2010), *"Bridging Contexts: The interplay between Family, Child, and Peers in Explaining Problem Behavior in Early Adolescence."* ICS-dissertation, Groningen
162. Nicole Tieben (2010), *"Transitions, Tracks and Transformations. Social Inequality in Transitions into, through and out of Secondary Education in the Netherlands for Cohorts Born Between 1914 and 1985."* ICS-dissertation, Nijmegen
163. Birgit Pauksztat (2010), *"Speaking up in Organizations: Four Studies on Employee Voice."* ICS-dissertation, Groningen
164. Richard Zijdeman (2010), *"Status Attainment in the Netherlands, 1811-1941. Spatial and Temporal Variation Before and During Industrialization."* ICS-dissertation, Utrecht
165. Rianne Kloosterman (2010), *"Social Background and Children's Educational Careers. The Primary and Secondary Effects of Social Background over Transitions and over Time in the Netherlands."* ICS-dissertation, Nijmegen
166. Olav Aarts (2010), *"Religious Diversity and Religious Involvement. A Study of Religious Markets in Western Societies at the End of the Twentieth Century."* ICS-dissertation, Nijmegen
167. Stephanie Wiesmann (2010), *"24/7 Negotiation in Couples Transition to Parenthood."* ICS-dissertation, Utrecht
168. Borja Martinovic (2010), *"Interethnic Contacts: A Dynamic Analysis of Interaction Between Immigrants and Natives in Western Countries."* ICS-dissertation, Utrecht
169. Anne Roeters (2010), *"Family Life Under Pressure? Parents' Paid Work and the Quantity and Quality of Parent-Child and Family Time."* ICS-dissertation, Utrecht
170. Jelle Sijtsema (2010), *"Adolescent Aggressive Behavior: Status and Stimulation Goals in Relation to the Peer Context."* ICS-dissertation, Groningen
171. Kees Keizer (2010), *"The Spreading of Disorder."* ICS-dissertation, Groningen
172. Michael Mäs (2010), *"The Diversity Puzzle. Explaining Clustering and Polarization of Opinions."* ICS-dissertation, Groningen
173. Marie-Louise Damen (2010), *"Cultuurdeelname en CKV. Studies naar effecten van kunsteducatie op de cultuurdeelname van leerlingen tijdens en na het voortgezet onderwijs."* ICS-dissertation, Utrecht
174. Marieke van de Rakt (2011), *"Two generations of Crime: The Intergenerational Transmission of Convictions over the Life Course."* ICS-dissertation, Nijmegen
175. Willem Huijnk (2011), *"Family Life and Ethnic Attitudes. The Role of the Family for Attitudes Towards Intermarriage and Acculturation Among Minority and Majority Groups."* ICS-dissertation, Utrecht
176. Tim Huijts (2011), *"Social Ties and Health in Europe. Individual Associations, Cross-National Variations, and Contextual Explanations."* ICS-dissertation, Nijmegen
177. Wouter Steenbeek (2011), *"Social and Physical Disorder. How Community, Business Presence and Entrepreneurs Influence Disorder in Dutch Neighborhoods."* ICS-dissertation, Utrecht
178. Miranda Vervoort (2011), *"Living Together Apart? Ethnic Concentration in the Neighborhood and Ethnic Minorities' Social Contacts and Language Practices."* ICS-dissertation, Utrecht
179. Agnieszka Kanas (2011), *"The Economic Performance of Immigrants. The Role of Human and Social Capital."* ICS-dissertation, Utrecht
180. Lea Ellwardt (2011), *"Gossip in Organizations. A Social Network Study."* ICS-dissertation, Groningen
181. Annemarije Oosterwaal (2011), *"The Gap between Decision and Implementation. Decision making, Delegation and Compliance in Governmental and Organizational Settings."* ICS-dissertation, Utrecht
182. Natascha Notten (2011), *"Parents and the Media. Causes and Consequences of Parental Media Socialization."* ICS-dissertation, Nijmegen
183. Tobias Stark (2011), *"Integration in Schools. A Process Perspective on Students' Interethnic Attitudes and Interpersonal Relationships."* ICS-dissertation, Groningen

184. Giedo Jansen (2011), *"Social Cleavages and Political Choices. Large-scale Comparisons of Social Class, Religion and Voting Behavior in Western Democracies."* ICS-dissertation, Nijmegen
185. Ruud van der Horst (2011), *"Network Effects on Treatment Results in a Closed Forensic Psychiatric Setting."* ICS-dissertation, Groningen
186. Mark Levels (2011), *"Abortion Laws in European Countries between 1960 and 2010. Legislative Developments and Their Consequences for Women's Reproductive Decision-making."* ICS-dissertation, Nijmegen
187. Marieke van Londen (2012), *"Exclusion of ethnic minorities in the Netherlands. The effects of individual and situational characteristics on opposition to ethnic policy and ethnically mixed neighbourhoods."* ICS-dissertation, Nijmegen
188. Sigrid Mohnen (2012), *"Neighborhood context and health: How neighborhood social capital affects individual health."* ICS-dissertation, Utrecht
189. Asya Zhelyazkova (2012), *"Compliance under Controversy: Analysis of the Transposition of European Directives and their Provisions."* ICS-dissertation, Utrecht
190. Valeska Korff (2012), *"Between Cause and Control: Management in a Humanitarian Organization."* ICS-dissertation, Groningen
191. Maike Gieling (2012), *"Dealing with Diversity: adolescents' support for civil liberties and immigrant rights."* ICS-dissertation, Utrecht
192. Katya Ivanova (2012), *"From Parents to Partners: The Impact of Family on Romantic Relationships in Adolescence and Emerging Adulthood."* ICS-dissertation, Groningen
193. Jelmer Schalk (2012), *"The Performance of Public Corporate Actors: Essays on Effects of Institutional and Network Embeddedness in Supranational, National, and Local Collaborative Contexts."* ICS-dissertation, Utrecht
194. Alona Labun (2012), *"Social Networks and Informal Power in Organizations."* ICS-dissertation, Groningen
195. Michal Bojanowski (2012), *"Essays on Social Network Formation in Heterogeneous Populations: Models, Methods, and Empirical Analyses."* ICS-dissertation, Utrecht
196. Anca Minescu (2012), *"Relative Group Position and Intergroup Attitudes in Russia."* ICS-dissertation, Utrecht
197. Marieke van Schellen (2012), *"Marriage and crime over the life course. The criminal careers of convicts and their spouses."* ICS-dissertation, Utrecht
198. Mieke Maliepaard (2012), *"Religious Trends and Social Integration: Muslim Minorities in the Netherlands."* ICS-dissertation, Utrecht
199. Fransje Smits (2012), *"Turks and Moroccans in the Low Countries around the year 2000: determinants of religiosity, trend in religiosity and determinants of the trend."* ICS-dissertation, Nijmegen
200. Roderick Sluiter (2012), *"The Diffusion of Morality Policies among Western European Countries between 1960 and 2010. A Comparison of Temporal and Spatial Diffusion Patterns of Six Morality and Eleven Non-morality Policies."* ICS-dissertation, Nijmegen
201. Nicoletta Balbo (2012), *"Family, Friends and Fertility."* ICS-dissertation, Groningen
202. Anke Munniksma (2013), *"Crossing ethnic boundaries: Parental resistance to and consequences of adolescents' cross-ethnic peer relations"* ICS-dissertation, Groningen
203. Anja-Kristin Abendroth (2013), *"Working Women in Europe. How the Country, Workplace, and Family Context Matter."* ICS-dissertation, Utrecht
204. Katia Begall (2013), *"Occupational Hazard? The Relationship between Working Conditions and Fertility."* ICS-dissertation, Groningen
205. Hidde Bekhuis (2013), *"The Popularity of Domestic Cultural Products: Cross-national Differences and the Relation to Globalization."* ICS-dissertation, Utrecht

206. Lieselotte Blommaert (2013), *"Are Joris and Renske more employable than Rashid and Samira? A study on the prevalence and sources of ethnic discrimination in recruitment in the Netherlands using experimental and survey data."* ICS-dissertation, Utrecht
207. Wiebke Schulz (2013), *"Careers of Men and Women in the 19th and 20th Centuries."* ICS-dissertation, Utrecht
208. Ozan Aksoy (2013), *"Essays on Social Preferences and Beliefs in Non-embedded Social Dilemmas."* ICS-dissertation, Utrecht
209. Dominik Morbitzer (2013), *"Limited Farsightedness in Network Formation."* ICS-dissertation, Utrecht
210. Thomas de Vroome (2013), *"Earning Your Place: The Relation Between Immigrants' Economic and Psychological Integration in the Netherlands."* ICS-dissertation, Utrecht
211. Marloes de Lange (2013), *"Causes and Consequences of Employment Flexibility Among Young People. Recent Developments in the Netherlands and Europe."* ICS-dissertation, Nijmegen
212. Roza Meuleman (2014), *"Consuming the Nation. Domestic cultural consumption: its stratification and relation with nationalist attitudes."* ICS-dissertation, Utrecht
213. Esther Havekes (2014), *"Putting interethnic attitudes in context. The relationship between neighbourhood characteristics, interethnic attitudes and residential behaviour."* ICS-dissertation, Utrecht
214. Zoltán Lippényi (2014), *"Transitions toward an open society? Intergenerational occupational mobility in Hungary in the 19th and 20th centuries."* ICS-dissertation, Utrecht
215. Anouk Smeekes (2014), *"The presence of the past: Historical rooting of national identity and current group dynamics."* ICS-dissertation, Utrecht
216. Michael Savelkoul (2014), *"Ethnic Diversity and Social capital. Testing Underlying Explanations Derived from Conflict and Contact Theories in Europe and the United States."* ICS-dissertation, Nijmegen
217. Martijn Hogerbrugge (2014), *"Misfortune and family: How negative events, family ties, and lives are linked."* ICS-dissertation, Utrecht
218. Gina-Felicia Potarca (2014), *"Modern Love. Comparative Insights in Online Dating Preferences and Assortative Mating."* ICS dissertation, Groningen
219. Mariska van der Horst (2014), *"Gender, Aspirations, and Achievements: Relating work and family aspirations to occupational outcomes."* ICS-dissertation, Utrecht
220. Gijs Huitsing (2014), *"A Social network perspective on bullying"* ICS dissertation, Groningen
221. Thomas Kowalewski (2015), *"Personal growth in organizational contexts."* ICS-dissertation, Groningen
222. Manuel Muñoz-Herrera (2015), *"The impact of individual differences on network relations: Social exclusion and inequality in productive exchange and coordination games."* ICS-dissertation, Groningen
223. Tim Immerzeel (2015), *"Voting for a change. The democratic lure of populist radical right parties in voting behavior."* ICS-dissertation, Utrecht
224. Fernando Nieto Morales (2015), *"The control imperative: Studies on reorganization in the public and private sectors."* ICS-dissertation, Groningen
225. Jellie Sierksma (2015), *"Bounded helping: How morality and intergroup relations shape children's reasoning about helping."* ICS-dissertation, Utrecht
226. Tinka Veldhuis (2015), *"Captivated by fear. An evaluation of terrorism detention policy."* ICS-dissertation, Groningen
227. Miranda Visser (2015), *"Loyality in humanity.Turnover among expatriate humanitarian aid workers."* ICS-dissertation, Groningen
228. Sarah Westphal (2015), *"Are the kids alright? Essays on postdivorce residence arrangements and children's well-being."* ICS-dissertation, Utrecht
229. Britta Rüschoff (2015), *"Peers in careers: Peer relationships in the transition from school to work."* ICS dissertation, Groningen

230. Nynke van Miltenburg (2015), *"Cooperation under peer sanctioning institutions: Collective decisions, noise, and endogenous implementation."* ICS-dissertation, Utrecht
231. Antonie Knigge (2015), *"Sources of sibling similarity. Status attainment in the Netherlands during modernization."* ICS-dissertation, Utrecht
232. Sanne Smith (2015), *"Ethnic segregation in friendship networks. Studies of its determinants in English, German, Dutch, and Swedish school classes."* ICS-dissertation, Utrecht
233. Patrick Präg (2015), *"Social stratification and health. Four essays on social determinants of health and wellbeing."* ICS dissertation, Groningen
234. Wike Been (2015), *"European top managers' support for work-life arrangements"* ICS-dissertation, Utrecht
235. André Grow (2016), *"Status differentiation: New insights from agent-based modeling and social network analysis"* ICS-dissertation, Groningen
236. Jesper Rözer (2016), *"Family and personal networks. How a partner and children affect social relationships"* ICS-dissertation, Utrecht
237. Kim Pattiselanno (2016), *"At your own risk: The importance of group dynamics and peer processes in adolescent peer groups for adolescents' involvement in risk behaviors"* ICS- dissertation, Groningen
238. Vincenz Frey (2016), *"Network formation and trust"* ICS-dissertation, Utrecht
239. Rozemarijn van der Ploeg (2016), *"Be a buddy, not a bully? Four studies on social and emotional processes related to bullying, defending, and victimization"* ICS-dissertation, Groningen
240. Tali Spiegel (2016), *"Identity, career trajectories and wellbeing: A closer look at individuals with degenerative eye conditions"* ICS- dissertation, Groningen
241. Felix Christian Tropf (2016), *"Social Science Genetics and Fertility"* ICS-dissertation, Groningen
242. Sara Geven (2016), *"Adolescent problem behavior in school: the role of peer networks"* ICS-dissertation, Utrecht
243. Josja Rokven (2016), *"The victimization-offending relationship from a longitudinal perspective"* ICS-dissertation, Nijmegen
244. Maja Djundeva (2016), *"Healthy ageing in context: Family welfare state and the life course"* ICS-dissertation, Groningen
245. Mark Visser (2017), *"Inequality between older workers and older couples in the Netherlands. A dynamic life course perspective on educational and social class differences in the late career"* ICS-dissertation, Nijmegen
246. Beau Oldenburg (2017), *"Bullying in schools: The role of teachers and classmates"* ICS-dissertation, Groningen
247. Tatang Muttaqin (2017), *"The education divide in Indonesia: Four essays on determinants of unequal access to and quality of education"* ICS-dissertation, Groningen
248. Margriet van Hek (2017), *"Gender inequality in educational attainment and reading performance. A contextual approach."* ICS-dissertation, Nijmegen
249. Melissa Verhoef-van Dorp (2017), *"Work schedules, childcare and well-being. Essays on the associations between modern-day job characteristics, childcare arrangements and the well-being of parents and children"* ICS-dissertation, Utrecht
250. Timo Septer (2017), *"Goal priorities, cognition and conflict: Analyses of cognitive maps concerning organizational change"* ICS-dissertation, Groningen
251. Bas Hofstra (2017), *"Online Social Networks: Essays on Membership, Privacy, and Structure"* ICS-dissertation, Utrecht
252. Yassine Khoudja (2018), *"Women's labor market participation across ethnic groups: The role of household conditions, gender role attitudes, and religiosity in different national contexts"* ICS-dissertation, Utrecht

253. Joran Laméris (2018), *"Living together in diversity. Whether, why and where ethnic diversity affects social cohesion"* ICS-dissertation, Nijmegen
254. Maaike van der Vleuten (2018), *"Gendered Choices. Fields of study of adolescents in the Netherlands"* ICS-dissertation, Utrecht
255. Mala Sondang Silitonga (2018), *"Corruption in Indonesia: The impact of institutional change, norms, and networks"* ICS-dissertation, Groningen
256. Manja Coopmans (2018), *"Rituals of the past in the context of the present. The role of Remembrance Day and Liberation Day in Dutch society"* ICS-dissertation, Utrecht
257. Paul Hindriks (2018), *"The Struggle for Power: Attitudes towards the political participation of ethnic minorities"* ICS-dissertation, Utrecht
258. Nynke Niezink (2018), *"Modeling the dynamics of networks and continuous behavior"* ICS-dissertation, Groningen
259. Simon de Bruijn (2018), *"Reaching agreement after divorce and separation. Essays on the effectiveness of parenting plans and divorce mediation"* ICS-dissertation, Utrecht
260. Susanne van 't Hoff-de Goede (2018), *"While you were locked up. An empirical study on the characteristics, social surroundings and wellbeing of partners of prisoners in The Netherlands"* ICS-dissertation, Utrecht
261. Loes van Rijsewijk (2018), *"Antecedents and Consequences of Helping among Adolescents"* ICS-dissertation, Groningen
262. Mariola Gremmen (2018), *"Social network processes and academic functioning. The role of peers in students' school well-being, academic engagement, and academic achievement"* ICS-dissertation, Groningen
263. Jeanette Renema (2018), *"Immigrants' support for welfare spending. The causes and consequences of welfare usage and welfare knowledgeability"* ICS-dissertation, Nijmegen
264. Suwatin Miharti (2018), *"Community health centers in Indonesia in the era of decentralization. The impact of structure, staff composition and management on health outcomes"* ICS-dissertation, Groningen
265. Chaïm la Roi (2019), *"Stigma and stress: Studies on attitudes towards sexual minority orientations and the association between sexual orientation and mental health"* ICS-dissertation, Groningen
266. Jelle Lössbroek (2019), *"Turning grey into gold. Employer-employee interplay in an ageing workforce"* ICS-dissertation, Utrecht
267. Nikki van Gerwen (2019), *"Employee cooperation through training. A multi-method approach"* ICS-dissertation, Utrecht
268. Paula Thijs (2019), *"Trends in cultural conservatism: The role of educational expansion, secularisation, and changing national contexts"* ICS-dissertation, Nijmegen
269. Renske Verweij (2019), *"Understanding childlessness: Unravelling the link with genes and the socio-environment"* ICS-dissertation, Groningen
270. Niels Blom (2019), *"Partner relationship quality under pressing work conditions. Longitudinal and cross-national investigation"* ICS-dissertation, Nijmegen
271. Müge Simsek (2019), *"The dynamics of religion among native and immigrant youth in Western Europe"* ICS-dissertation, Utrecht
272. Leonie van Breeschoten (2019), *"Combining a career and childcare: The use and usefulness of work-family policies in European organizations"* ICS-dissertation, Utrecht
273. Roos van der Zwan (2019), "*The political representation of ethnic minorities and their vote choice"* ICS-dissertation, Nijmegen
274. Ashwin Rambaran (2019), "*The classroom as context for bullying: A social network approach*" ICS-dissertation, Groningen
275. Dieko Bakker (2019), *"Cooperation and social control: Effects of preferences, institutions, and social structure"* ICS-dissertation, Groningen
276. Femke van der Werf (2019), "*Shadow of a rainbow? National and ethnic belonging in Mauritius*" ICS-dissertation, Utrecht

277. Robert Krause (2019), *"Multiple Imputation for Missing Network Data"* ICS-dissertation, Groningen
278. Take Sipma (2020), *"Economic insecurity and populist radical right voting"* ICS-dissertation, Nijmegen
279. Mathijs Kros (2020), *"The nature of negative contact: studies on interethnic relations in western societies"* ICS-dissertation, Utrecht
280. Lonneke van den Berg (2020), *"Time to leave: Individual and contextual explanations for the timing of leaving home"* ICS-dissertation, Amsterdam
281. Marianne Hooijsma (2020), "*Clashrooms: Interethnic peer relationships in schools"* ICS-dissertation, Groningen
282. Marina Tulin (2020*), "Blind Spots in Social Resource Theory: Essays on the Creation, Maintenance and Returns of Social Capital"* ICS-dissertation, Amsterdam
283. Tessa Kaufman (2020), "*Toward Tailored Interventions: Explaining, Assessing, and Preventing Persistent Victimization of Bullying"* ICS-dissertation, Groningen
284. Lex Thijssen (2020), *"Racial and Ethnic Discrimination in Western Labor Markets: Empirical Evidence from Field Experiments"* ICS-dissertation, Utrecht
285. Lukas Norbutas (2020), *"Trust on the Dark Web: An analysis of illegal online drug markets"* ICS-dissertation, Utrecht
286. Tomáš Diviák (2020), *"Criminal Networks: Actors, Mechanisms, and Structures"* ICS-dissertation, Groningen
287. Tery Setiawan (2020), "*Support for Interreligious Conflict in Indonesia*" ICS-dissertation, Nijmegen
288. Vera de Bel (2020), "*The ripple effect in family networks. Relational structures and well-being in divorced and non-divorced families*" ICS-dissertation, Groningen
289. Diego Palacios (2020), *"How Context and the Perception of Peers' Behaviors Shape Relationships in Adolescence:*
A Multiplex Social Network Perspective" ICS-dissertation, Groningen
290. Saskia Glas (2020), *"Where are the Muslim Feminists?: Religiosity and Support for Gender Equality in the Arab region*" ICS-dissertation, Nijmegen
291. Tomas Turner-Zwinkels (2020), *"A New Macro-Micro Approach to the Study of Political Careers: Theoretical, Methodological and Empirical Challenges and Solutions"* ICS-dissertation, Groningen
292. Lotte Scheeren (2020), "*Not on the Same Track? Tracking Age and Gender Inequality in Education"* ICS-dissertation, Amsterdam
293. Joris Broere (2020), "*Essays on how social network structure affects asymmetric coordination and trust*" ICS-dissertation, Utrecht
294. Marcus Kristiansen (2021*), "Contact with Benefits: How Social Networks affect Benefit Receipt Dynamics in the Netherlands"* ICS-dissertation, Utrecht
295. Judith Kas (2021), "*Trust and reputation in the peer-to-peer platform economy*" ICS-dissertation, Utrecht
296. Andrea Forster (2021), "*Navigating Educational Institutions: Mechanisms of Educational Inequality and Social Mobility in Different Educational Systems"* ICS-dissertation, Amsterdam
297. Jannes ten Berge (2021), *"Technological change and work: The relation between technology implementation within organizations and changes in workers' employment"* ICS-dissertation, Utrecht
298. Jolien Geerlings (2021), *"Teaching in culturally diverse classrooms: The importance of dyadic relations between teachers and children"* ICS-dissertation, Utrecht