



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

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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 high ethnic identification). Our results show that teachers feel somewhat less self-efficacious with ethnic minority versus majority students. And, the difference in self-efficacy with minority versus majority students was more pronounced in relation to internalizing problem behaviors 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.

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. In an educational context, self-efficacy thus results 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

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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, examined 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, on average they score lower on standardized tests at the end of primary school and are represented more often in vocational rather than academic tracks 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 (Zee, Koomen, Jellesma, Geerlings, & de Jong, 2016). Thus, we focused on possible differences in teachers' 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/or the ethnic classroom composition.

1.1. 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 (1997, p. 3), 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”. 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, Rowan, & Cheong, 1992; Ross, Cousins, & Gadalla, 1996). Another line of research has examined teacher self-efficacy in specific domains of teaching (Tsoloupas, Carson, Matthews, Grawitch, & Barber, 2010; Woolfolk Hoy & Burke Spero, 2005). The most prominent work in this field was conducted by Tschannen-Moran and Woolfolk Hoy (2001, 2007) who developed a domain-specific instrument pertaining to three unique but interrelated domains of teaching: instructional strategies, classroom management, and student engagement. Recently, Zee, Koomen, et al. (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, Koomen, Spilt, & Oort, 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, Koomen, 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).

1.2. The role of student ethnicity

Very little is known about teacher self-efficacy in relation to students from different ethnic or racial backgrounds (further referred to as *ER minority students*; see Umaña-Taylor et al., 2014).¹ 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 ER minority versus ER majority students. In the present study, we used Zee, Koomen, et al.'s (2016) measure to examine teachers' self-efficacy

¹ Following Umaña-Taylor et al.'s (2014) integrated conceptualization of ethnic and racial identity we do not make a distinction between ethnicity and race because we are concerned with majority group teachers and their relations with the particular groups of ethnic/racial minority students in the context of the country they live in.

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 ER minority groups (Glock, Krolak-Schwerdt, Klapproth, & Böhmer, 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 or racial incongruence: as teachers often belong to the ER majority, their relations with ER minority students are ER 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 Grijjs, 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 ER 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, Hamre, & Stuhlman, 2003; Spilt, Koomen, & Thijs, 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.

1.3. Conditions for differential self-efficacy

There are several conditions that may affect teachers' sense of self-efficacy with ER 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.

1.3.1. 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 ER 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 ER 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 disproportionately harsh treatment and discipline from their (ethnic majority) teachers (Bates & Glick, 2013; Gregory, Allen, Mikami, Hafen, & Pianta, 2014; Gregory & Mosely, 2004; Skiba, Michael, Nardo, & Peterson, 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 considered 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, Koomen, et al., 2016), both types of problems can place strong demands on teachers and therefore increase the importance of relationship (in)congruence.

1.3.2. 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 examined 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 (cf., 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 expected teachers to experience more self-efficacy with minority versus majority students in classrooms with a relatively high number of minority children.

1.4. In summary

To summarize, the aim of this study was to investigate the extent to which ethnic majority teachers experience differences in self-efficacy when teaching individual ethnic minority and majority students. We assumed 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 was that ethnic majority group teachers would 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 towards 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. Method

2.1. 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% 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% were selected for participation. In total 489 schools were contacted by email and phone, of which 18 participated in the study, which amounts to a 3.6% 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 ($SD = 11.66$).² They were asked to fill out a 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% 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% of schools in the Netherlands have an ethnic minority student population of 50% 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 *Measures*). 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 were thus omitted. Subsequently, 23 (7.67%) students had missing values on the independent variables (see *Measures*), and as the pattern of missing values appeared to be completely at random according to Little's MCAR test ($\chi^2(5) = 4.005, p = 0.568$), 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

² 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.

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 2. 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.

2.2. Measures

2.2.1. 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, Koomen, 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, Koomen, et al., 2016). Additionally, student specific TSES was shown to be concurrently valid, as it was moderately correlated the original TSES scale ($r = 0.59, p < 0.001$).

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 1), that a model with three factors at both the within and between levels fit the model significantly worse than a model with four factors at the between ($\Delta \chi^2 (22) = 43.390, p < 0.001$) and within model ($\Delta \chi^2 (0) = 156.008, p < 0.001$). 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 ($\Delta \chi^2 (22) = 36.529, p < 0.05$). And because, theoretically, we preferred the four factor model, we decided to estimate the four-factor as previously used (Zee, Koomen, et al., 2016). We therefore proceeded with a confirmatory factor analysis, modeling four factors at both levels, which showed a reasonable model fit ($\chi^2 (526) = 1174.817, p < 0.001, RMSEA = 0.065, CFI = 0.904, SRMR_{within} = 0.063, SRMR_{between} = 0.154$). 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 ($\omega_{within} = 0.91, \omega_{between} = 0.99$).

2.2.2. 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*).

Table 1
Model fit statistics for exploratory factor analysis for Student-specific teacher self-efficacy.

Nr. of factors	χ^2	Df	CFI	RMSEA	SMRS within	SMRS between
3 within/3 between	899.461 (456)		0.934	0.058	0.035	0.097
3 within/4 between	856.071 (434)	43.390 (22)***	0.937	0.058	0.034	0.067
4 within/3 between	700.063 (434)	156.008 (0)***	0.961	0.046	0.028	0.092
4 within/4 between	663.534 (412)	36.529 (22)*	0.963	0.046	0.028	0.073

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ (two-sided).

2.2.3. 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*; $\omega_{\text{between}} = 0.92$).

2.2.4. 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 were 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 students 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.

2.2.5. Control variables

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

2.3. 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 = -0.866 , Kurtosis = 0.291), 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 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 presented standardized effects in Tables and Figures. All continuous variables were centered on their mean to enhance the interpretation of the findings.

3. Results

3.1. Preliminary analyses

For descriptive purposes, we first inspected the mean scores for ethnic minority and majority students on the main study variables (Table 2). There were significant mean differences on internalizing problem behavior; teachers reported significantly less internalizing problem behavior among ER minority students. No mean differences were found for externalizing problem behavior. Mean differences in teacher self-efficacy towards minority- and majority students show that teachers feel less efficacious with ER minority

Table 2
Descriptive statistics and analysis of variance of difference between ethnic majority and -minority students.

Student level	Range	Native Dutch N = 112		Non-native Dutch N = 180		Df ¹
		M	SD	M	SD	
Female	0–1	0.54	0.50	0.48	0.50	– 0.06
Age	9–13	10.29	0.96	10.69	1.02	0.40**
Internalizing prob. behavior	0–4	1.15	0.98	0.88	0.87	– 0.27*
Externalizing prob. behavior	0–4	0.96	0.81	0.95	0.84	– 0.01
SS TSE – Instructional strategies	0–6	4.98	0.81	4.72	1.00	– 0.26*
SS TSE – Behavioral management	0–6	5.23	0.93	5.22	1.09	– 0.01
SS TSE – Student engagement	0–6	4.94	0.91	4.65	1.09	– 0.29*
SS TSE – Emotional support	0–6	5.12	0.72	4.97	0.81	– 0.15

Teacher level	Range	Native Dutch N = 40	
		M	SD
Age	20–63	41.58	12.98
Female (ref. Male)	0–1	0.75	0.44
Dutch identification	0–3	2.44	0.76
Ethnic composition classroom	0–1	0.57	0.30

Note. ¹ Anova with ethnic majority as reference group. **p* < 0.05, ***p* < 0.01, ****p* < 0.001 (two-sided).

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 3 showed that girls displayed less 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.

3.2. 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 4) and the intraclass correlations for teacher self-efficacy was 0.250 (*p* < 0.01). This means that 25% 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 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* = 0.035). However, it explained a marginal 1.4% of the variance in teacher self-efficacy. In the

Table 3
Bivariate correlations between student- and teacher level variables.

Student level	1.	2.	3.	4.	5.	6.	7.	8.
1. ER minority background	–							
2. Female	– 0.051	–						
3. Age	0.190**	0.061	–					
4. Internalizing prob. behavior	– 0.139*	0.076	– 0.042	–				
5. Externalizing prob. behavior	– 0.005	– 0.253**	– 0.059	0.301***	–			
6. SS TSE – Instructional strategies	– 0.136*	0.087	– 0.019	– 0.297***	– 0.480***	–		
7. SS TSE – Behavioral management	– 0.001	0.191**	0.054	– 0.204***	– 0.714***	0.528***	–	
8. SS TSE – Student engagement	– 0.138*	0.126*	0.017	– 0.273***	– 0.567***	0.911***	0.586***	–
9. SS TSE – Emotional support	– 0.095	0.140*	0.025	– 0.227***	– 0.527***	0.861***	0.647***	0.872***

Teacher level	1.	2.	3.
1. Age	–		
2. Female (ref. Male)	– 0.298	–	
3. Dutch identification	0.017	– 0.120	–
4. Ethnic composition classroom	– 0.079	0.293	0.125

Note. **p* < 0.05, ***p* < 0.01, ****p* < 0.001 (two-sided).

Table 4
Standardized effects of ethnicity, conditions and controls on student-specific teacher self-efficacy.

	Model 0	Model 1	Model 2	Model 3	Model 4
Student level					
Non-Dutch (cont. Dutch)		− 0.170*	− 0.166*	− 0.185*	− 0.110*
Female			0.154**	0.009	0.017
Age			− 0.073	− 0.058	− 0.082~
Conditions					
Internalizing problem behavior				− 0.121**	− 0.029
Externalizing problem behavior				− 0.589***	− 0.602***
Non-Dutch * Int. prob. beh.					− 0.158*
Non-Dutch * Ext. prob. beh.					0.026
Teacher-level					
Female			0.226	0.262	0.266
Age			− 0.001	0.021	0.052
Conditions					
Dutch identification				0.123	0.126
Ethnic composition classroom				0.023	− 0.119
Non-Dutch * Dutch id.					0.007
Non-Dutch * Ethnic comp.					0.197~
Variance					
Level 1 (stud.)	0.532	0.518***	0.498***	0.276***	0.231***
Level 2 (teacher)	0.177 (ICC 0.250)	0.182**	0.188**	0.115**	0.082*
Total (% explained vs previous model)	0.709	0.700 (1.4%)	0.686 (2%)	0.391 (43%)	0.313 (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. ~ $p < 0.06$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

subsequent model we took the covariates into account (see Model 2, Table 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 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% 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 likely 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 this variable as control variable.³

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

The third model shows the results for the effects of problem behavior, teachers' Dutch identification and the ethnic composition of the classroom (Model 3, Table 4). Problem behavior had a negative effect on teacher self-efficacy and externalizing problem behavior in particular. After adding these variables to the model, the negative effect of student ethnicity remained significant ($B = -0.185$, $p < 0.05$). 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 41.6% in the residual variance in teacher self-efficacy.

In the next step (Model 4, Table 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 ($B = -0.158$, $p = 0.024$; 95% CI: -0.290 , -0.026). No such interaction effect was found for externalizing problem behavior. The interaction indicates that teachers

³ 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.

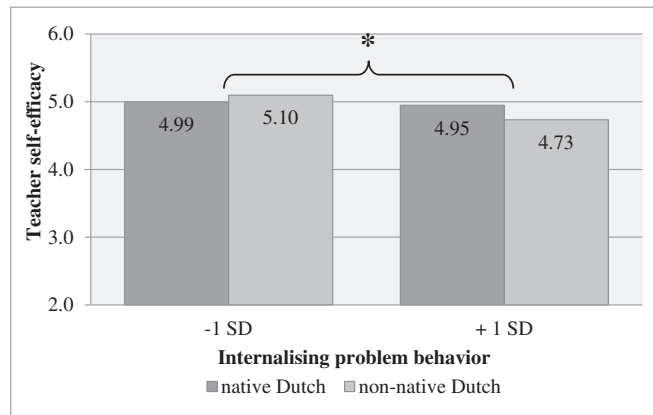


Fig. 1. Moderation effect of internalizing problem behavior and student ethnicity on teacher self-efficacy. * $p < 0.05$.

felt less self-efficacious with minority as compared to majority students with high internalizing problem behaviors (see Fig. 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 ethnicity and the proportion of minority students in class ($B = 0.197, p = 0.06$; 95% CI: $-0.003, 0.398$). 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 ER minority students, and feel less so when teaching classrooms with a lower proportion (see Fig. 2). Adding the moderators to the model explained an additional 19.9% of the variance in teacher self-efficacy compared to the previous model without interactions.

3.4. 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 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 ($B = -0.242$) and student engagement ($B = -0.176$) 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 only marginally significant ($p = 0.034$, 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 ($p = 0.046$, with one-sided testing) and student engagement ($p = 0.044$, with one-sided testing). This indicates that teachers found themselves somewhat more self-efficacious in instructing and engaging ER minority students in classrooms with a higher percentage of minority students, and less so in classrooms with 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.

Overall, the findings for general self-efficacy hold for the domains of instructional strategies and student engagement in

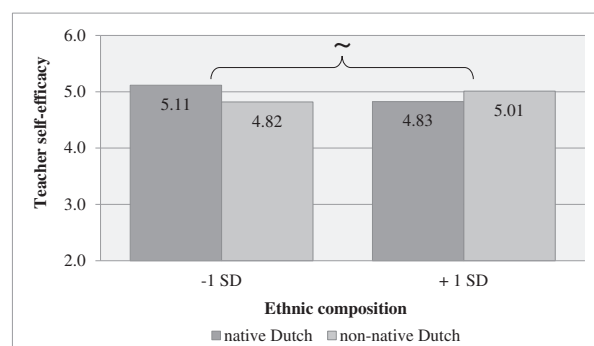


Fig. 2. Moderation effect of ethnic composition and student ethnicity on teacher self-efficacy. $\sim p < 0.06$.

Table 5
Standardized effects of conditions on student-specific teacher self-efficacy.

	SS TSSES - IS	SS TSSES - BM	SS TSSES - SE	SS TSSES - ES
Student level				
Non-Dutch (cont. Dutch)	0.186~	-0.071	-0.210~	-0.152
Conditions				
Internalizing problem behavior	-0.066□	0.011	-0.051	-0.017
Externalizing problem behavior	-0.510***	-0.858***	-0.602***	-0.516***
Non-Dutch * Int. prob. beh.	-0.242*	-0.026	-0.176~	-0.138□
Non-Dutch * Ext. prob. beh.	0.073	-0.070	0.036	0.054
Teacher-level variables				
Conditions				
Dutch identification	0.147	0.076	0.123	0.110
Ethnic composition classroom	-0.203~	-0.021	-0.122	-0.123
Non-Dutch * Dutch identification	0.067	-0.009	0.061	0.027
Non-Dutch * Ethnic comp. classroom	0.252~	0.081	0.231~	0.192□
Variance				
Level 1 (student)	0.304***	0.283***	0.262***	0.223***
Level 2 (teacher)	0.074	0.019	0.055	0.123~
AIC	588.407	529.616	541.483	515.730

Note. Model estimation includes control variables at both student and teacher level. □ < 0.1, ~p < 0.05, *p < 0.0125, **p < 0.0025, ***p < 0.00025.

particular. Teacher self-efficacy for behavioral management was mainly explained by externalizing problem behavior and unrelated to students' ethnic background.

4. 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 ER 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 ER 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 ER 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 ER minority students, both in interpersonal student-teacher relationships (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 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, den Brok, Veldman, & van Tartwijk, 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; 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 more simple 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 ER minority and majority backgrounds more salient to teachers.

Consistent with previous research (Tsouloupas et al., 2010; Zee, Koomen, 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 ER minority, 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 (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, Koomen, 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.

4.1. 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 work-loads and perhaps, therefore, less self-efficacious teachers. However, the response rate within schools was reasonable (67%) 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 (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 ER minority groups.

Fourth, we interpreted the effects of student ER 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 ER 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 ER 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.

4.2. 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 et al., 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, ER 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 ER 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 ER 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 ER 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 who may benefit from additional guidance or support in managing cultural diversity in the classroom, in order to enhance their sense of self-efficacy in ER incongruent student-teacher interactions.

4.3. 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 ER 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 ER 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.

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