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DOI

[10.1080/13803611.2018.1550838](https://doi.org/10.1080/13803611.2018.1550838)

Publication date

2018

Document Version

Final published version

Published in

Educational Research and Evaluation

License

Article 25fa Dutch Copyright Act

[Link to publication](#)

Citation for published version (APA):

Agirdag, O. (2018). The impact of school SES composition on science achievement and achievement growth: mediating role of teachers' teachability culture. *Educational Research and Evaluation*, 24(3-5), 264-276. <https://doi.org/10.1080/13803611.2018.1550838>

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The impact of school SES composition on science achievement and achievement growth: mediating role of teachers' teachability culture

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ABSTRACT

Previous studies have shown that schools' socioeconomic-status (SES) composition has an impact on the academic performance of pupils. Less attention has been given to the explanation of this effect. This study examined whether the teachability culture among the school staff (teachers' collective beliefs about how teachable their pupils are) mediated the school SES effect on science achievement and achievement growth. Multilevel analyses were conducted with data from 1,761 pupils and 1,255 teachers across 66 primary schools in Flanders. First, the analyses indicated that there was a positive association between school SES composition and teachability culture: Even after controlling for cognitive ability and performance of pupils, there was a more pessimist culture in socioeconomically disadvantaged schools. Second, the association between school SES and academic performance was explained/mediated by the teachability culture. However, no school effects or mediation effects were found for achievement growth as the covered period of academic growth was too short.

KEYWORDS

School SES composition; science achievement; teachability; teacher culture; staff culture; teacher expectations

Introduction

Does it matter with whom you go to school? Ever since James Coleman and his team (1966) published their classic study, the impact of ethnic and socioeconomic school composition on pupils' academic achievement has been analysed in hundreds of studies (for meta-reviews, see Driessen, 2007; Van Ewijk & Sleegers, 2010). Whereas most early studies were conducted in the US, the issue of school composition has increasingly been investigated by European educational researchers (for Germany: Rjosk, Richter, Lüdtke, & Eccles, 2017; for Italy: Contini, 2013; for France: Cebolla Boado, 2007; for The Netherlands: Veerman, Van de Werfhorst, & Dronkers, 2013; for Belgium: Agirdag, Van Houtte, & Van Avermaet, 2012; Belfi, Haelermans, & De Fraine, 2016; for Norway: Hermansen & Birkelund, 2015; for Turkey: Özdemir, 2016; for Spain: Cebolla Boado & Garrido Medina, 2010). These studies generally have demonstrated that a schools' socioeconomic-status composition (hereafter: school SES) is related to pupils' academic achievement; that is, pupils who

attend high-SES schools are found to perform better than similar pupils who attend low-SES schools. There is less consensus with respect to the impact of schools' racial, national origin, or linguistic composition. Reviews and meta-analyses show that the ethnic aspect of school composition is only marginally related to the academic performance of individual pupils (Van Ewijk & Sleegers, 2010); although it is important to note that *how* composition effects are modelled seems to influence the findings (see Timmermans & Thomas, 2015).

Although most of these previous studies have focussed on the direct effect of school compositional features – that is [school SES → performance] – some scholars also have examined how the composition effects can be explained or mediated by process variables (see Agirdag, Van Houtte, & Van Avermaet, 2013; Dewulf, Van Braak, & Van Houtte, 2017; Rjosk et al., 2014). These studies generally have revealed that instructional quality and teacher beliefs (see also Hattie, 2012) mediate (or explain) why school SES is related to academic performance. This study builds further on this research about teacher effects in relation to school composition effects, while it contributes with two novel aspects.

First, an important topic with respect to teacher beliefs or expectation effects is the “accuracy” issue; that is, if teacher beliefs or expectations are *accurate* perceptions about the abilities of their pupils (see Timmermans, Kuyper, & Van der Werf, 2015), then we cannot speak about self-fulfilling prophecies, which is defined by Merton (1948) as “a *false* definition of the situation evoking a new behaviour which makes the original false conception come *true*” (p. 195). Therefore, an indication of the real abilities of pupils needs to be included in the models before examining teacher expectation effects. As such, this study will replicate the model of [school SES → teacher beliefs → achievement] while controlling for abilities (non-verbal IQ) of pupils.

Second, the identified school SES effects could reflect selection effects if schools with a higher school SES just attract better students. Yet, some of the previous studies used cross-sectional data (e.g., Agirdag et al., 2012, 2013), which makes it hard to rule out selection effects. While controlling for ability can partly correct for this, a longitudinal study can mostly exclude selection bias if the achievement *growth* is modelled. Therefore, this study will also focus on achievement growth [school SES → teacher beliefs → achievement growth].

Theory

School composition → Teachability culture

Research on the impact of compositional school characteristics focusses mainly on how schools' SES or ethnic composition influences pupils and their academic performance. However, it is not too far-fetched to hypothesise that school composition may also have an impact on teachers and their beliefs; that is, because teachers are inclined to adjust their beliefs and expectations to the contextual factors of their schools. In particular, the compositional features of the school may have an impact on teachers, since teacher beliefs are liable to existing social stereotypes regarding schools with certain student compositions (see Boone, Thys, Van Avermaet, & Van Houtte, 2018; Dewulf et al., 2017). For instance, in Flanders – the northern part of Belgium where this study was conducted – schools with large numbers of poor immigrant pupils are commonly called concentration

schools, which is a pejorative term. In the public discourse, a concentration school is almost a synonym for a school with low academic performance (Agirdag, 2011). Teachers do also influence each other, and a set of shared beliefs might emerge within schools that constitute the staff culture of a school. Newly arrived teachers are usually socialised within the existing staff culture (Kelchtermans & Ballet, 2002).

Starting from the influential work of Becker (1952) and Rist (2000), it has repeatedly been found that a pupil's *individual* social class and ethnic background have an important influence on teacher beliefs and expectations; that is, more favourable teacher expectations are found for ethnic majority and higher SES pupils, even after controlling for actual levels of ability (Harvey & Slatin, 1975; Rubie-Davies, Peterson, Irving, Widdowson, & Dixon, 2010; Van den Bergh, Denessen, Hornstra, Voeten, & Holland, 2010). However, a school's socioeconomic or ethnic make-up can also have an influence on teacher beliefs and expectations. For instance, Valerie Lee and her colleagues found that teachers' responsibility (i.e., their willingness to hold themselves accountable for the learning of their students) was lower in schools that enrolled a higher share of low-SES and ethnic minority students, both at the individual teacher level and at the collective school level (Halvorsen, Lee, & Andrade, 2009; Lee & Loeb, 2000). Van Houtte (2011) conceptualised these collective (school-level) teacher beliefs and expectations as part of the staff culture, where culture was defined as "a set of cognitions shared by members of a social unit" (Van Houtte, 2011, p. 85).

In the present study, the first objective was to examine whether school SES had an impact on the teachability culture. Teachability beliefs are defined as school-wide beliefs of teachers about the capacities and willingness of their pupils to learn, that is, teacher expectations regarding how teachable their pupils were (Kornblau, 1982). The teachability culture is then defined as the school staff's shared teachability expectations for the pupils of their school. In terms of school composition, the focus is on the school SES composition as previous studies have already shown that ethnic composition was hardly related to pupils' academic performance (see introduction section). In sum, the first research objective is to study the relationship between school SES composition and teachability culture, while taking account of possible confounders such as the actual level of cognitive ability of pupils and their previous academic performance.

Teachability culture → Academic performance

Even if a school's teachability culture is determined by the composition of that school, the former must be associated with pupils' academic achievement in order to account for the impact of school composition on academic achievement or achievement growth. Research on the impact of (individual) teacher beliefs dates back at least to the work of Becker (1952), who argued that a problematic teacher–student relationship emerged when working-class students did not meet the standards of the ideal pupil which teachers held. However, the issue of teacher expectations became widely known after the pioneering work of Rosenthal and Jacobson (1968). In their Pygmalion experiment, teachers were told that some of their pupils were bloomers and likely to make large progress over the year of the experiment. Although these bloomers were randomly selected, 8 months later they did make larger progress than other pupils in their school. The Pygmalion study had a large impact on public and scientific thinking. In the popular press, writers had begun to argue that teacher

expectancies were major reasons for racial, social-class, and gender inequalities. However, starting from the early 1970s, influential works showed that these claims were oversimplified and exaggerated (Brophy, 1983; Cooper, 1979; Jussim, 1989). Although not disproving the idea of the self-fulfilling prophecy, these studies showed that the size of the teacher expectation effects was rather small and that teachers' expectations were more accurate – that is, consistent with pupils' previous achievements – than biased. However, some teachers evoke larger and long-lasting expectations than others (De Boer, Bosker, & Van der Werf, 2010; Meissel, Meyer, Yao, & Rubie-Davies, 2017).

Jussim (1986) provided an integrative theoretical framework of the underlying causal mechanism of teacher expectations and self-fulfilling prophecies. He distinguished three sequential stages: the first step was that a teacher developed expectations about a pupil's achievement which might be based on information gathered from prior interactions with the pupil, such as previous achievement, ethnicity, social class, or gender. The second step was that a teacher behaved differently according to his or her expectations. For instance, Rosenthal (1973) distinguished four mechanisms by which teachers might hinder students' educational progress, including the positive social-emotional climate they created towards high-expectation pupils, the amount of feedback pupils received, the amount and the quality of the subject material offered, and the chances provided to ask or to answer questions. The third and final step was that pupils reacted consistently with teacher expectations.

Jussim (1986) defined a self-fulfilling prophecy as a "situation in which a teacher's expectations about a student's future achievement evoked from the student performance levels consistent with the teacher's expectation" (p. 429). It is clear that this definition, as well as most previous studies on teacher expectation effects, was strongly focussed on the individual relationship between a teacher and a student. However, teachers do not only have expectations about individual pupils but also about the group of students in their school (Thys & Van Houtte, 2016). According to Brophy (1983), teachers' differential treatment of groups of pupils is as widespread as the differential treatment of individual pupils, and is an equally strong mediator of the effects of expectancy on achievement. Moreover, expectations with respect to a whole group are communicated more directly than expectations of individual pupils (Cooper, 1985). Although these works are related to the class level, similar mechanisms are expected to play at the school level, which is the focus of this study. More specifically, the hypothesis is that if low expectations are part of the staff culture (in terms of low teachability culture), then this staff culture will have a negative influence on individual teachers, on their efforts, the quality of subject material they offer, and other instructional behaviour. The instructional behaviour of teachers, in turn, is one of the most important elements that determines academic performance (Hattie, 2012). In sum, the second objective of this study was to investigate whether the effects of school SES on pupil achievement and achievement growth could be explained by the school staff's teachability culture.

Methods

Participants

Data gathered as part of the project *Valorizing Linguistic Diversity in Multiple Contexts of Primary Education (Validiv)* were used. Although collected for other purposes, the Validiv

data were suitable for examining both research questions as they included the needed information. The data were collected between 2011 and 2013 from 66 primary schools in three urban areas in Flanders, Belgium. Multistage sampling was conducted. In the first instance, in order to encompass the entire range of SES composition, three cities in Flanders were selected that had relatively diverse populations. Second, using data gathered from the Flemish Education Ministry, 212 primary schools were chosen within these selected regions and 31% of the schools agreed to participate. Non-response analyses revealed that the likelihood of responding positively or negatively was not related to various school characteristics (school composition, denomination, school size, school region). Within the participating 66 schools, fourth-grade pupils (aged 8–9) were surveyed at the beginning of the academic year (T1; $N = 1,761$) and at the end of the next academic year in the fifth grade (aged 9–10; T2; $N = 1,643$). It is important to note that there was only 1.5 years between T1 and T2. In two schools, no science achievement tests were administered due to time constraints, and one school dropped out in the second wave; decreasing the number of schools to 63. Other descriptive statistics are given in Table 1. Some observations are missing for some variables; thus, the reported numbers in Table 1 might differ for some variables.

Additionally, all teachers in these schools were asked to fill in a questionnaire in which their teachability beliefs about the pupils of the school in general were surveyed (T1; $N = 1,255$). As the focus of the present study was the mediating role of the staff culture, it was not only a specific teacher such as the class teacher or science teacher that was surveyed, but all teachers within the school were asked to fill in the questionnaire. The data of the school staff were aggregated at the school level (see below), to have an indication of a school's staff-culture. The intra-class correlation (ICC) was calculated to test whether taking the aggregate score was legitimate.

Variables

The ultimate dependent variable of the study was *science achievement*, which was measured at T1 and T2 with a standardised test derived from the Trends in International Mathematics and Science Study (TIMSS). Science achievement at T1 was assessed with a test containing 34 items selected from the publicly released items of the TIMSS test (see Mullis et al., 2003). Criteria for item selection were international standard level (5

Table 1. Descriptive statistics.

	<i>N</i>	Min	Max	Mean	<i>SD</i>
Pupil level					
T1 science achievement	1,761	6.000	34.000	21.296	4.884
T2 science achievement	1,643	0.000	45.000	26.649	6.790
Cognitive ability (raven)	1,646	10.000	56.000	38.770	7.714
SES	1,761	13.870	88.960	50.125	22.462
Teacher level					
Teachability beliefs	1,247	2.133	5.000	3.494	0.430
School level					
Teachability culture	66	2.919	4.148	3.461	0.301
T1 science achievement	64	14.400	25.857	20.844	2.643
T2 science achievement	63	18.000	32.625	25.862	4.163
Cognitive ability (raven)	63	26.500	44.842	38.318	3.481
SES	66	28.002	76.254	49.258	12.961

levels of difficulty), cognitive domain (knowledge of facts, understanding of concepts, reasoning and analysing), and subject (biology, physics, geography). The answers were binary coded, with a maximum score of 34 points. The Cronbach's alpha of the individual test items at T1 was 0.720. Science achievement at T2 was measured with a similar test with 46 items. The Cronbach's alpha at T2 was 0.7805 (see [Table 1](#) for descriptive statistics).

Cognitive ability of students was measured as the deductive skills of the children on the Standard Progressive Matrices of Raven (Raven, 1960). This test was administered in Wave 2 of this project. It tested whether children could use the given (non-linguistic) information to solve a diagram. The children received five increasingly difficult sets with 12 diagrams each (in total 60 diagrams or items). Each question included a diagram with a missing piece. The children received six pieces to complete the design. Only one piece was the correct solution. The Cronbach's alpha of the individual test items was 0.875.

SES was measured with the international socioeconomic index of occupational status (ISEI of 2008) of parents (Ganzeboom, 2010). The highest ISEI score of the parents was used as an indicator of parental SES.

Teachers' beliefs regarding the teachability of their pupils were measured with 31 items of the Teachable Pupil Survey (Kornblau, 1982). The scale was made up of 31 items assessing expectations of pupil characteristics encompassing school-adjusted behaviours (such as "concentrate well", "enjoy school work"), cognitive-motivational behaviours (such as "intelligent", "curious"), and personal-social behaviours (such as "calm", "confident"). The items such as "I think that in this school the pupils in general are inquisitive" were rated from *absolutely disagree* (scored 1) to *definitely agree* (scored 5). Cronbach's alpha for the teachability scale was 0.945 (see [Table 1](#) for descriptive statistics).

Statistical analyses

Two-level multivariate regression analyses were conducted as the data set consisted of a clustered sample of students and teachers nested within schools. Mplus 7 software was used for this purpose (Muthén & Muthén, 2012). Random-intercept fixed-slope models were calculated, as there was no theoretical reason to employ a random slope model.

First, the association between school SES and teachability culture was estimated. These results are presented in [Table 2](#). Second, the effects of school SES on science academic achievement and achievement growth were calculated. The results are presented in four models in [Table 3](#). Model 1 shows the effect of school SES on science achievement at T2, while controlling for pupil-level SES, cognitive ability, and school-level cognitive ability. Model 2 introduced teachability culture (as aggregated measure) at the school level as a mediating variable. A 2-2-1 mediation analysis was performed (see Bauer,

Table 2. Two-level regression model predicting staff teachability culture: standardised estimates.

	Estimate	SE	p
School mean SES	.458	.098	.000
School mean IQ	-.115	.073	.115
School science achievement T1	.594	.085	.000
Residual variances	.214	.051	.000
R square	.786	.051	.000

Preacher, & Gil, 2006) by examining the indirect effect of school SES (at Level 2) via teachability culture (at Level 2) on science achievement T2 (at Level 1). Model 3 provided the effects of school SES on science achievement *growth* by including achievement scores at T1 at pupil level and school level. Model 4 introduced teachability culture to examine similar mediational analysis on achievement growth as in Model 2.

The effects reported in the Results section are not standardised. Standardised effect sizes are reported in the tables. The StdYX standardisation is reported, which was achieved by the multiplication of the effect size with the standard deviation of the predictor variable divided by the standard deviation of the dependent variable. No variables were centred.

Missing data were dealt with using the full information maximum likelihood (FIML) method. FIML uses all available data to estimate parameters based on the available complete data as well as the implied values of the missing data, given the observed data (see Enders & Bandalos, 2001).

Results

Research Objective 1

The first objective of this study was to examine whether school SES was related to school staffs' culture of teachability, that is, to what degree teachers collectively thought that pupils at their school were teachable. The intraclass correlation for teachability beliefs was 0.406; which indicated that there was a moderate level of agreement between teachers when it came to their perspective on how teachable their pupils were. As there was a shared perspective among teachers within a school, it was possible to speak about a teachability *culture* among the teachers within schools. Hence, the school-level aggregation of individual teacher scores was justified.

The results of multilevel analysis indicated that school SES was significantly related to teachability culture. Even after controlling for mean cognitive ability and science achievement at T1 at school level, school SES significantly predicted the staff's culture of teachability (effect estimate = 0.010; standard error [SE] = 0.002; p value < 0.001). For standardised

Table 3. Two-level regression model predicting science achievement: standardised estimates.

	Model 1 (achievement)			Model 2 (achievement)			Model 3 (growth)			Model 4 (growth)		
	Est.	SE	p	Est.	SE	p	Est.	SE	p	Est.	SE	p
Student level												
SES	.210	.019	.000	.209	.019	.000	.130	.018	.000	.129	.018	.000
Cognitive ability	.413	.024	.000	.435	.024	.000	.294	.023	.000	.294	.023	.000
T1 science achievement	n/a	n/a	n/a	n/a	n/a	n/a	.449	.024	.000	.448	.024	.000
Residual variance	.743	.022	.000	.743	.022	.000	.573	.023	.000	.573	.023	.000
R square	.257	.022	.000	.257	.022	.000	.427	.023	.000	.427	.023	.000
School level												
School SES	.761	.237	.001	.309	.222	.164	.169	.218	.439	.142	.267	.596
School ability	.100	.259	.700	.202	.204	.321	.177	.177	.318	.188	.179	.294
Teachability culture	n/a	n/a	n/a	.456	.100	.000	n/a	n/a	n/a	.071	.114	.053
T1 science achievement	n/a	n/a	n/a	n/a	n/a	n/a	.686	.092	.000	.639	.120	.000
Residual variance	.280	.068	.000	.203	.055	.000	.086	.029	.002	.087	.028	.002
R square	.720	.068	.000	.797	.055	.000	.911	.029	.000	.913	.028	.000
Indirect effect												
School SES → Teachability	n/a	n/a	n/a	.357	.077	.000	n/a	n/a	n/a	.059	.093	.527

parameters, see Table 2). In other words, in schools with a higher school SES, teachers collectively tended to expect that their pupils were more teachable. This was the case after controlling for objective levels of achievement and cognitive ability, which indicated that in socioeconomically disadvantaged schools, the school staff tended to have more biased expectations.

Research Objective 2

The second research objective was to examine whether school SES had an impact on academic achievement (Model 1, Table 3) and on achievement growth (Model 3, Table 3) and, if so, to examine whether these effects could be explained by the staff's teachability culture (in Model 2 and Model 4, respectively). The ICC for science achievement at T2 was .302.

First, a model was estimated in which teachability culture was not included (see Model 1, Table 3). This model showed that even after controlling for pupil-level SES and cognitive ability at pupil level and school level, the school-level SES was significantly related to science achievement at T2 (unstandardised effect estimate = .244; $SE = .074$; $p < .001$). For standardised parameters, see Table 3.

In Model 2 (Table 3), teachability culture (i.e., staff culture on teachability) was entered into the model. Teachability culture was significantly related to pupils' science performance at T2 (effect estimate = 5.717; $SE = 1.441$; $p < .001$). Most importantly, after entering teachability culture, the effect of school SES dramatically dropped in size and became insignificant (unstandardised effect estimate = .099; $SE = .069$; $p = .148$). This indicated that the effect of school SES was mediated by the teachability culture among the school staff. The indirect effect was calculated to confirm this. The path analysis indeed showed that school SES had an indirect effect via teachability culture on science achievement at T2 (effect estimate = .116; $SE = .030$; $p < .001$). For standardised parameters, see Table 3.

In Model 3 (Table 3), pupil achievement at T1 at pupil level and school level were included to examine the effects on science achievement *growth*. This model indicated that school SES was *not* significantly related to achievement growth between the fourth grade and the fifth grade ($p = .439$). As there was no direct effect of school SES on achievement growth, it followed that the indirect effect through teachability culture – calculated in Model 4 – was not statistically significant either ($p = .527$).

Conclusion and discussion

The objectives of this study were twofold. The first objective was to investigate whether the SES composition of the school had an influence on the shared beliefs of teachers, more specifically, on the teachability culture among the school staff, which is an indication of the shared teacher expectations within a school about how teachable the pupils are in that school. This objective was necessary for the second objective of the study, namely, to examine whether the school-SES composition effects on the academic performances of pupils could be explained (mediated) by the teachability culture among the school staff. The aim of the study was to add to both: the growing literature that focusses on the

mediating effects of school composition (Rjosk et al., 2014; Thys & Van Houtte, 2016) and to the ongoing literature about teacher beliefs (see this special issue).

The results of the first objective showed that the teachability culture in schools was indeed related to the SES composition of the pupil body. In other words, teachers' collective beliefs were associated with the socioeconomic context of the schools they were working in. This was the case even after controlling for average previous academic achievement and cognitive ability of pupils. Hence, even in schools with similar performance and similar cognitive abilities, teachers tended to expect that their pupils were more teachable if they were teaching higher SES pupils than when they were teaching in schools with pupils with disadvantaged SES backgrounds. This finding is disturbing, as there is no objective reason why pupils in a school with more socioeconomically disadvantaged children should be regarded as less teachable. However, it could be that pupils in those schools have different work habits and that this shaped teachers' beliefs and expectations (see Timmermans, De Boer, & Van der Werf, 2016) – a hypothesis for future research. Nevertheless, the culture of lower teachability among the school staff might not only have a negative effect on pupils but might also have unfavourable consequences for teachers themselves. Newly beginning teachers working in schools with a higher share of disadvantaged students tend to drop out or leave for other schools (Clotfelter, Ladd, & Vigdor, 2005). This trend might be triggered and worsened by the negative culture of low teachability beliefs in low-SES schools.

The results of the second objective of this study revealed that teachability culture was not only related to science achievement, but it also mediated the effect of school SES on science achievement. Even after controlling for the cognitive ability of pupils (both at pupil and school level), pupils who were enrolled in schools with a higher teachability culture performed better in science than in schools with a more pessimistic teachability culture among the school staff. This relationship explained (mediated) why school SES was related to science achievement to a large extent. Thus, it seems that teachers' expectations and beliefs not only matter at the individual level, but the staff culture (at school level) seems also to be important. However, the analysis of science achievement *growth* showed that there was no significant effect of school SES on achievement growth. There was also no significant effect of teachability culture on achievement growth. This might be explained by the fact that the time span that the growth was modelled (the duration between T1 and T2) was only 1.5 years; probably too short to find any substantive effects.

Before the implications of this study are summarised, some limitations need to be discussed. As noted above, one limitation of this study was the short period of time between the two waves of data collection. This is probably the reason why school SES effects on achievement growth (that had been found in previous studies) could not be replicated in this study. Hence, future studies that aim to replicate the findings of this study are recommended to analyse achievement growth data for longer periods (preferably 2 years or longer). A second limitation of this study was that no data were available about teachability beliefs of *individual* pupils. The teachability measure that was used in this study referred to the pupils in a school in general. It might be interesting to examine whether taking the aggregate score of teacher beliefs of individual students correlated well with the measurement of teachability beliefs that was employed in the current study. A third limitation of the present study was that only one curriculum subject was covered (science) due to

practical reasons. Hence, it follows that future research that focusses on different subjects is highly recommended.

The findings of this study have several practical implications. The first implication is the importance of efforts to change teacher expectations (see other contributions in this special issue). School officials and policymakers are recommended to keep investing to improve the expectations of teachers. However, in light of the above results, training programmes that do so are recommended not only to pay attention to how individual student characteristics might have an influence on teachers but also to explain that the characteristics of the school in terms of SES composition are decisive as well. Second, it is also vital that teacher education programmes equip future teachers with accurate knowledge on how their beliefs and expectations might be shaped by the school characteristics, which might have severe negative consequences in the long run. Currently, in Flanders as in other parts of Europe, there are indications that teachers are not prepared well to function adequately in low-SES schools or schools with high ethnic diversity (see Agirdag, Merry, & Van Houtte, 2016). One important part of teacher training, then, should focus on the aspects of staff culture. The staff culture might shape how lower expectations are established. If newly arriving teachers are armed with more accurate knowledge on this issue, they might protect themselves against those staff cultures of low expectations in the short run. In the long run, they might even slowly alter the school culture towards high expectation.

Disclosure statement

No potential conflict of interest was reported by the author.

Notes on contributor

Orhan Agirdag (PhD) is an assistant professor at KU Leuven and the University of Amsterdam. Formerly, he was a Fulbright Fellow at the University of California at Los Angeles. His main research interests include inequalities in education, teacher education, multilingualism, and religiosity. He is an author of more than one hundred publications that have been cited over 900 times, and he has received various prestigious awards. Currently, Orhan Agirdag holds the chair of scientific research at the Netherlands Initiative for Education Research (NRO). He is frequently invited to give public talks, and his opinions are regularly featured in the media. Professor Agirdag is a member of the Flemish Young Academy.

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