Be true to your school? Teachers' turnover intentions: The role of socioeconomic composition, teachability perceptions, emotional exhaustion and teacher efficacy

Lennart Van Eycken, Ama Amitai and Mieke Van Houtte

Abstract

Teacher turnover negatively impacts educational quality. This study investigates whether schools' socioeconomic composition (SES), teachers' teachability perceptions, emotional exhaustion and teacher efficacy impact teachers' intention to quit and transfer schools. Through multilevel analysis on data of 1247 teachers in 59 Flemish schools, our results indicate that teachers are more emotionally exhausted in low-SES schools, resulting in stronger intentions to transfer schools. This association is explained through the lower teachability levels that teachers ascribe to students in low-SES schools. Intentions to quit teaching do not vary across schools. Efficacious teachers show less intent to quit teaching partly due to less emotional exhaustion.

Keywords: Teacher attrition, teacher mobility, socioeconomic composition, teachability, emotional exhaustion, teacher efficacy

To cite this article: Van Eycken, L., Amitai, A., & Van Houtte, M. (2022). Be true to your schools? Teachers' turnover intentions: the role of socioeconomic composition, teachability perceptions, emotional exhaustion and teacher efficacy. *Research Papers in Education*. doi: 10.1080/02671522.2022.2089208

Introduction

Teacher turnover is a disrupting factor in order to obtain qualitative education in schools (Ronfeldt, Loeb, & Wyckoff 2013). It is a persistent issue, requiring schools to constantly search for new teaching forces, and often to lose them again after a short period of time (Holme et al. 2018; Ingersoll 2003). Turnover combines both teacher attrition where teachers exit the profession, and teacher mobility where teachers transfer to a different school. Teacher attrition and mobility result in a loss of schools' social capital, especially if highly experienced and competent teachers decide to change school or leave their job (Holme & Rangel 2012). When teachers leave, social ties and networks of support collapse, which results in loss of knowledge in schools which negatively impacts student achievement (Holme et al. 2018). Ingersoll (2001, 2003) shows that turnover due to retirement is relatively small, while teachers who pursue other careers are actually one of the primary reasons why schools suffer from shortages. Especially novice teachers (30%) leave within five years.

Most studies have analysed both attrition and mobility processes (e.g., Boyd et al. 2008; Djonko-Moore 2016; Ingersoll 2003), but often neglect how these two processes might differ. For schools, the outcome of both processes is the same, as teachers end up leaving and new teachers need to be hired (Ingersoll 2001). Although teacher attrition and mobility have the same consequence for a particular school, consequences in terms of the whole educational system are different (Ingersoll 2001). Teachers who exit the profession add on to the total teacher shortage, which impacts the overall educational quality for all students. If a teacher transfers to another, more preferred school setting, this may result in a redistribution of teacher quality within the educational system (Goldhaber, Gross, & Player 2011; Ingersoll 2001).

Whereas leaving the profession is more related to characteristics of the teaching career path, teachers' quitting intentions are also associated with the school context (Goldhaber, Gross, & Player 2011; Hanushek, Kain, & Rivkin 2004). Teacher mobility seems to be strongly related to specific teaching and school settings, since these working conditions are changeable when transferring to another school (Hanushek, Kain, & Rivkin 2004). The student body composition is a stronger trigger for teacher mobility when compared to attrition (Mueller et al. 1999). Regarding teacher attrition or mobility, the schools' migrant composition has been most commonly studied (e.g., Omenn Strunk & Robinson 2006; Scafidi et al. 2007). Previous research seems to minimize the role of socioeconomic students' composition, which is nevertheless strongly associated with schools' migrant composition. It is not merely students' migration background that may reduce teachers' wellbeing, but the fact that these students often live in poverty (Goddard, Tschannen-Moran, & Hoy 2001). Migrant composition

in schools appears to be more salient in the American context compared to the European one (Falch & Strøm 2005), emphasizing the need to analyse the role of schools' socioeconomic composition.

Teaching in low-SES schools is associated with perceiving students as less teachable (e.g., Thrupp 1999; Author 2003). How teachers perceive their students can affect their feelings toward their own teaching position and may influence their own notions about their teaching capabilities (Gutentag, Horenczyk, & Tatar 2018). For example, teachers' efficacy, and consequently teachers' turnover intentions, is affected if teachers view their students as assets, problems or challenges (Johnsrud & Rosser 2002). However, when teachers are experiencing low levels of emotional exhaustion or when teachers are feeling highly efficacious, they may be able to overcome more demanding situations, such as teaching in low-SES schools (Dicke et al. 2014).

Intentions to leave are considered to be the main indicator of actual attrition or mobility. However, prior to affecting intentions to leave the profession or the specific school, students' socioeconomic composition and teachers' teachability perceptions may firstly affect teachers' emotional exhaustion and teacher efficacy (Goddard & Skrla 2006; Skaalvik & Skaalvik 2011). Therefore, this research aims to analyse processes that provoke intentions to leave the profession and intentions to leave the school. Few studies of attrition and mobility have focused on how the impact of the school may differ for teachers who consider leaving the profession or transfer schools (see: Falch & Strøm 2005). Hence, our study distinguishes both kinds of turnover and examines how the school context is associated with teachers' intentions to leave or to transfer. We investigate more specifically whether the schools' socioeconomic student composition and teachers' teachability perceptions firstly affect teachers' emotional exhaustion and efficacy, which in turn can precede both types of turnover intentions (Glickman & Tamashiro 1982).

Theoretical framework

Teacher turnover intentions

There are several ways to measure teacher turnover. An important distinction can be made between studies that analyse actual turnover data and studies that focus on teachers' intentions to leave (Clandinin, Downey, & Huber 2009; Räsänen et al. 2020). Turnover intentions are often seen as a precursor before teachers leave the profession or school and prove to be one of the strongest predictors of actual turnover (Griffeth, Hom, & Gaertner 2000). Therefore, research agrees to use turnover intentions as proxies for actual turnover (e.g., Tiplic, Brandmo, & Elstad 2015; Kapadia, Coca, & Easton 2007). There are two main reasons for measuring intentions. Firstly, the theory of planned behaviour supports the premises that attitudes are strong predictors of behaviour, as intent to withdraw is the last cognitive step to leave before the actual key decision (Ajzen, Czasch, & Flood 2009). Secondly, scholars often rely on turnover intentions based on more pragmatic reasons since intentions are more amendable to study. It can be scaled and measured with nuances while actual turnover is a dichotomous event which requires longitudinal data to assess (Author 2021; Dalton, Johnson, & Daily 1999). In addition, it is ethically complicated to associate teachers' exit to their background information as surveys are anonymous and school often protect this information. Generally, it is more feasible to investigate intentions when teachers are still clustered within schools (Author 2021).

Teacher turnover implies a deliberate choice to stop working in one's school context where two processes can be distinguished: attrition and mobility (Gray & Taie 2015). Teacher attrition is when teachers leave the profession, whilst teacher mobility consists of teachers leaving a certain school context to teach elsewhere. The majority of studies have analysed both attrition and mobility, but often overlook how these two processes might differ (e.g., Boyd et al. 2008; Ingersoll 2003). Attrition creates an overall shortage of teachers, while mobility can disturb the equal distribution of teachers across schools, creating a situation where novices are overrepresented in disadvantaged schools (Goldhaber et al. 2011). School context seems to be a stronger trigger for teacher mobility as teachers' commitment to their career is often independent of the students since the teacher can find another student population to teach in a school elsewhere (Author 2021; Mueller et al. 1999). Therefore, when researching turnover, it is essential to look at attrition and mobility separately.

The school context and teacher turnover

Few studies include contextual factors to investigate both teacher mobility and attrition (e.g., Hanushek, Kain, & Rivkin 2004; Ingersoll 2003), however, Hanushek and colleagues (2015) indicate that teacher mobility and attrition are rather related to students' characteristics than to individual teacher characteristics. Most scholars agree that school composition, especially socioeconomic and migrant composition, influences both teacher attrition and mobility (Elfers, Plecki, & Knapp 2006; Hanushek et al. 2015; Ingersoll 2001; Scafidi et al. 2007). Previous studies report strong associations between school composition and teacher mobility, and to a lesser extent, between school composition and teacher attrition (Falch & Strøm 2005). Hanushek and colleagues (2015), together with Scafidi and colleagues (2007), show that low-SES schools with mostly black students show much higher attrition rates than other types of schools.

Studies of teacher turnover do not often compare the processes behind teacher attrition and mobility (Hughes 2012). Nevertheless, different processes may occur for switching schools or quitting the profession (Goldhaber, Gross, & Player 2011). Scafidi and colleagues (2007) believe that teachers find teaching less enjoyable in low-SES and minority schools and may seek to transfer to other schools, because teachers perceive themselves as less effective in these schools. Scholars indicate that

teachers, who are mainly white, middle-class women, prefer teaching students who are like themselves (Hughes 2012; Omenn Strunk & Robinson 2006). Mueller and colleagues (1999) demonstrated that white teachers are more likely to leave a school when they experience an ethnic mismatch. Differences between students' home culture and the school are referred to as a cultural mismatch (Delpit 2006), where teachers easily misread students because they associate school appropriate behaviour with cultural capital which is familiar to them. As such, an ethnic mismatch turns into a cultural mismatch when teachers are not acquainted with students unlike themselves (Entwisle & Alexander 1993).

Moreover, in low-SES and ethnic minority schools, unfavourable teacher and student outcomes, such as teacher distrust of teachers towards students, is shown to be rather the result of the students' socioeconomic characteristics (Author 2011a). Teachers who mainly have a middle-class background may also portray a cultural mismatch with their students, based on their different socioeconomic status. Not knowing how to deal with low-SES students may cause issues with diversity in general, which affect intentions to quit (Kopetz, Lease, & Warren-Kring 2006). Educators agree that teaching in high-poverty settings is challenging, even for experienced teachers (Kopetz, Lease, & Warren-Kring 2006). Teachers are confronted with the students' academic needs as well as the social consequences of students living in poverty and being faced with considerably more stressful situations (Kraft et al., 2015). Those findings correspond with several studies that show that teacher turnover is higher in low-SES schools (Boyd et al. 2008; Djonko-Moore 2016; Hanushek et al. 2004; Ingersoll 2003).

However, research regarding the effect of schools' socioeconomic composition is not entirely conclusive. Boyd and colleagues (2011) did not find significant relationships between the schools' SES-context and mobility among urban teachers. Other studies have found that teachers have even lower intentions to leave the profession in low-SES schools (Harrell, Thompson, & Brooks 2019; Hughes 2012), contradicting the majority of the studies.

The role of teacher perceptions and emotional exhaustion

How teachers perceive low-SES students may be detrimental for their engagement to work in low-SES schools. Teachers' perceptions of their students influence intentions to switch schools (Hoy 1990), in particular teacher mobility from low-SES schools, as these suffer from negative stereotypes (Brault, Janosz & Archambault 2014). Teachers have lower expectations of working-class students in several respects, independent of their academic performance as they are perceived as behaviourally more challenging (Tenenbaum & Ruck 2007). Low-SES students are perceived as less mature and less self-regulatory than their peers, which implies lower teacher expectations, lower teachability perceptions and lower levels of trust (Goddard, Salloum, & Berebitsky 2009; Thrupp 1999). Teachability perceptions are a specific aspect of teachers' expectations, which reflects teachers' assumptions about students' ability to meet the normative and academic expectations imposed on them in school (Author 2011b). For example, teachers make more negative statements about low-SES students as teachers indicate that those students lack discipline, are too social and do not complete their schoolwork (Diamond, Randolph, & Spillane 2004). Teachers feel less trust towards their students in low-SES schools due to low teachability perceptions (Author 2009).

The unfavourable perceptions teachers have about low-SES students can contribute to teacher burnout (e.g., Wynn et al. 2007). It is widely acknowledged that burn-out consists out of three dimensions: emotional exhaustion, depersonalisation and reduced personal accomplishment (Dworkin 1987; Maslach & Jackson 1981). Commonly, emotional exhaustion has been considered the core component of burn-out (Cropanzano, Rupp, & Byrne 2003) and has often been adopted as the sole indicator to measure burn-out in several studies (e.g., Cropanzano, Rupp, & Byrne 2003; Tsouloupas et al. 2010). Tsouloupas and colleagues (2010) have shown that teacher perceptions of student misbehaviour indirectly affect teacher turnover intentions through emotional exhaustion.

For teacher retention, alleviating emotional exhaustion before it drives teachers out of the profession or school district seems an important matter (Boe, Cook, & Sunderland 2008). Moreover, turnover intentions are already an advanced and long-term stage of dissatisfaction as it requires several months or even years to turn into a resignation (Acker 2004). As suggested by Hoy (1990) and Tsouloupas and colleagues (2010), the students' socioeconomic composition with the associated lower teachers' teachability perceptions may initially affect emotional exhaustion, prior to directly impacting turnover intentions.

Yet, student characteristics in low-SES schools alone cannot provide a complete explanation why teachers leave these schools more often. Schools' working conditions might also partly explain the relationship between the student composition and teacher turnover, as studies have indicated that teachers experience more dissatisfaction within low-SES schools because of the schools' infrastructure and class sizes, in addition to less valuable relationships with students, parents, colleagues and school leadership (Simon & Johnson 2015).

Teacher efficacy and emotional exhaustion preceding turnover intentions

Besides the contextual differences between schools, teachers have intrinsic characteristics such as teacher efficacy that precede turnover intentions. Teacher efficacy is mostly defined as teachers' perceptions of their own capacities to encourage student engagement and learning, even if those students lack motivation or are perceived as difficult (Armor et al. 1976; Bandura 1997; Tschannen-Moran & Hoy 2001). Previous studies emphasize the importance of teachers' confidence in their ability to motivate students and to perform actions that enhance student learning (Hughes 2012; Perrachione, Rosser, & Petersen 2008; Poulou 2007). Hence, teacher efficacy is an important individual characteristic that is strongly related to teachers' practice, beliefs, stress and to student outcomes, but also to teacher retention. In addition, teachers who experience emotional exhaustion and burnout often feel less efficacious and are more likely to leave the profession (Glickman & Tamashiro 1982), while a greater teaching commitment is expressed by teachers who feel highly efficacious (Coladarci 1992).

However, few studies genuinely evaluated the impact of teacher efficacy on retention, accounting for contextual effects (Hughes 2012). There are studies demonstrating a relation between efficacy and burnout (e.g., Evers et al. 2002), although Skaalvik and Skaalvik (2007) acknowledge there is less agreement about how to explain this relation. A lack of confidence in teachers' own abilities, or in other words, low efficacy feelings, increases occupational stress, which may increase emotional exhaustion (Skaalvik & Skaalvik 2007). Sass, Seal and Martin (2011) revealed that student stressors, such as lack of student motivation and working with students of mixed ability, mediated the relationship between teacher efficacy and job dissatisfaction, which is strongly related to teachers' intention to quit or transfer schools (Ingersoll 2001; Sass et al. 2011; Skaalvik & Skaalvik 2011). These student stressors could be linked with teachers' emotional exhaustion as teachers who have increased stress levels tend to have elevated psychological distress and lower commitment to the profession (Gersten et al. 2001). Burnout, with emotional exhaustion as the most important component, may be the result of coping unsuccessfully with persistent stress (Jennett, Harris, & Mesibov 2003). Those findings demonstrate that teachers' efficacy is strongly related with teachers' stress levels, distress, commitment, and we assume, emotional exhaustion as well (Skaalvik & Skaalvik 2010). Mainly based on the findings of Sass and colleagues (2011), together with the results of Skaalvik and Skaalvik (2007), we believe that high-efficacy teachers will experience lower feelings of emotional exhaustion and, in turn, reduced intention to quit.

Other relevant teacher characteristics and transactional factors

One of the most important predictors of turnover is the level of experience one has. The majority of studies focus on experience or age of teachers (e.g., Ingersoll, 2001). The reasons teachers stop teaching may strongly vary according to the level of experience a teacher has. For example, a high rate of novice teachers switch careers before they can reach their teaching potential, as these novice teachers feel like 'they are thrown in the deep end' in the beginning of their careers, having the same responsibilities as more experienced teachers (Khamis, 2000).

Furthermore, research on the effect of the teachers' gender on turnover reveals conflicting findings. On the one hand research has showed evidence that men are more likely to leave teaching compared to women (Imazeki, 2005) and that male teachers have both more intentions to leave the profession (Borman & Dowling, 2008) as intentions to transfer schools (Boyd et al., 2005).

Although most studies distinguish individual and organizational factors in teacher research, Chang (2009) has proposed to take into account 'transactional factors'. This is based on the transactional model of Lazarus and Folkman (1984), stating that individuals interpret stressors differently, depending on their coping resources. Those transactional factors can be partly filled in by teachers' working conditions. Working conditions explain most of the relationship between the student composition and teacher turnover (Simon & Johnson, 2015), for example teachers' tenured status, teachers' perceptions of the school infrastructure, class size, workload, perceptions of peer support, etc.

Current study

Firstly, the aim of this study is to investigate whether teachers have more turnover intentions in low-SES schools, namely intentions to quit the profession and intentions to transfer. Many studies indicated that teachers have higher turnover intentions in low-SES schools (e.g., Boyd et al. 2008; Djonko-Moore 2016; Ingersoll 2003), although some studies have found that teachers in low-SES schools have lower turnover intentions (Harrell et al. 2019; Hughes 2012). We assume that this association might be explained by how teachers perceive their students in terms of teachability, as most teachers perceive low-SES students as less teachable (Thrupp 1999; Author 2003). However, some teachers make a deliberate choice to teach disadvantaged students from a social justice perspective (Haberman 2005). Secondly, this research aims to analyse the processes that lead up to turnover intentions. We investigate the interplay between the schools' socioeconomic student composition, the teachers' teachability perceptions, teacher efficacy and teachers' emotional exhaustion. After all, previous studies have indicated that schools' socioeconomic composition influences teacher retention through teachers' teachability perceptions, which might coincide with teacher efficacy, which in turn is related with emotional exhaustion. This last association might suggest that teacher efficacy affects teacher retention through teachers' emotional exhaustion.

Flemish context: teacher shortage and inequality in secondary schools

Teacher shortage in Flanders is becoming increasingly problematized, especially in cities (Struyven & Vanthournout 2014). Additionally, the projected growth of the school population in Flanders is among the largest in Europe and this growth will be mainly concentrated in disadvantaged groups in urban areas (OECD 2017). This entails possible risks for low-SES or minority students, as

qualitative educational services are increasingly more precarious in cities if there is no rise in the teacher recruitment and drop in retention numbers (Nusche et al. 2015). Secondary schools in Flanders are often attracting students from specific socioeconomic and ethnic backgrounds, which provokes a high degree of socio-ethnic segregation (Karsten et al. 2003). International educational achievement tests, such as PISA (OECD), point out that the socioeconomic background of the students is very determining for school performance in the Flemish school system (OECD 2017). In OECD-countries the test results for reading are for averagely 12% explained by the socioeconomic status of the student, while 19% of the results are explained by the students' SES in Belgium. The socioeconomic inequalities in the Flemish education reflect the way secondary education is structured in the tracking system (Author 2004). In Flanders, from the third year of secondary school there are four types of tracks, commonly organized in distinct schools: the academic track, the arts track, the technical track and the vocational track. Students' and their parents' track choice is based on the students' academic abilities, yet it is also very dependent on their social background (Author 2013).

Methods

Data

The data, which is part of the 'Teaching in the Bed of Procrustes' project, was gathered in the school years 2012-2013 and 2013-2014. It is based on surveys that were taken from both students and teachers in the first and second grade (seventh and eighth grade in the US system) of Flemish secondary schools. Based on information from the Department of Education, all schools that offer first and second grade of secondary education in the Flemish region were inventoried. A disproportionally stratified sample was used as certain criteria were used to delineate subpopulations. Afterwards, random sample were drawn from each subpopulation. To adequately represent the Flemish educational context, the subpopulations of schools were selected based on three criteria: geographical spread in the Flemish region (five Flemish provinces and the Brussels Capital Region), location (rural or urban) and educational network (public or private/catholic schools). First, we selected a fair representation of schools for all five provinces and the Brussels Capital Region. Second, based on the census of 1991, schools were classified as urban or rural-based. Third, an adequate representation of educational network was based on records from the Department of Education, showing 69% catholic versus 31% public schools in the Flemish region. Six rural and six urban schools were selected in the five Flemish provinces, with four catholic schools and two public schools for each province, corresponding with the Flemish educational context. The Brussels Capital Region constitutes a special case because of its size and level of urbanization. Accordingly, three urban schools were selected with two catholic schools and one public school. Applying this sampling frame, three random samples from

each subpopulation were drawn. The principal of each school was asked if the school was willing to participate. If schools refused to participate, another school was contacted from the same subpopulation, but from the second random sample. If those schools refused as well, schools from the third random sample were approached. In the end, we reached out to 124 schools to result in a representative sample of 59 participating schools (response rate of 46.8%), which is actually an acceptable result, as Flemish schools are being swamped with research requests, which causes a lower response rate. Non-response was mostly fuelled by either the involvement in a different research project, or the existent heavy workload of the staff. While there are some small divergences in the sample from the population, it is unlikely that these pose a problematic distortion of the data. Vantieghem (2016) confirmed that no systematic biases occurred and that the schools were largely representative of the population. Furthermore, the study design guaranteed data from students from various backgrounds, and from several regions, making the data representative for 12-13-year-olds in Flanders (Author 2016). The data were gathered in three waves with two waves in school year 2012-2013 and a third wave at the end of school year 2013-2014. This study will use the first and second wave, gathered at the beginning and the end of school year 2012-2013. In the first wave, 1247 teachers (response rate 69.5%) and 6380 students (response rate 97%) participated through questionnaires. In the second wave, 1087 teachers (response rate 60.6%) and 6234 students (response rate 94.4%) filled out the questionnaire. In total, 900 teachers filled in both surveys of the first and second wave. The two waves are used to construct the variables for the present analysis, however, only the variable teachability was taken from the second wave.

Variables

Teachers' intention to quit the profession was measured with the three-item scale from Hackett, Lapierre and Hausdorf (2001). The items were 'I think about quitting the teaching profession', 'I intend to quit the teaching profession' and 'I expect to move into another profession'. Teachers could indicate how much these items applied to them (from 'Never' to 'Always'). The scores were summed to obtain a scale ranging from zero to 12 (α =.91). Higher scores on the scale imply that teachers have stronger intentions to quit the teaching profession. The mean score on teacher attrition is 1.87 (*SD*=2.13; *n*=1046), which means that, on average, few teachers have strong intentions to quit their job.

Teachers' intention to transfer was measured with the same three items as intentions to quit the profession but specified towards quitting the school instead of the profession. To confirm we were measuring a different construct, factor analysis was carried out using the six items. Two separate factors were found, confirming the difference between the two constructs. The factor loadings for intentions to transfer were ranging from .67 to .77. One item, for example, was '*I think about quit teaching in this school*'. Teachers could indicate how much these items apply to them (from '*Never*' to 'Always'). The scores of the three items were summed to produce a scale ranging from 0 to 12 (α =.85). Higher scores imply that the teacher has strong intentions to leave the school. The mean score on teacher mobility is 1.84 (*SD*=2.16; *n*=1046), which proves that Flemish teachers show, on average, low intentions to transfer schools.

The socioeconomic composition of the school was measured by taking the mean SES of the students for each school (Author 2012; Rumberger & Palardy 2005). The SES of the student was measured using the highest occupation of both parents (1=unskilled manual labour; 2=specialized manual labour; 3=skilled manual labour; 4=routine non-manual employees; 5=farmers and smallholders; 6=lower grade employees and administrators; 7=higher-grade administrators and executives; 8=professionals and large proprietors) (Erikson, Goldthorpe, & Portocarero 1979; Author 2003). In case of unemployment the last occupation was considered. This variable will be implemented as a metric variable as it consists out of more than five categories and behaves linear (e.g., Erikson et al. 1979). The individual SES scores were aggregated by taking the mean, so when a school scores high on socioeconomic composition, the school counts more students with a high SES. The mean score of socioeconomic composition of the schools is 5.03 (*SD*=.87; *n*=58). Schools scored from minimum 2.57 to maximum 6.59 (Table 1).

Migrant composition was measured by calculating the proportion of students with a migrant background at each school. As is common practice, the principal criterion was the birthplace of the students' maternal grandmothers, with Western European birthplaces considered as '*native*' (Timmerman, Hermans, & Hoornaert 2002). In case of missing data, the mothers' and fathers' nationalities were considered and/or additional criteria as language spoken at home (other than Dutch) and religion (i.e., Islam). This dichotomous variable (1=migrant background) was used to calculate the proportion of ethnic minority students in schools. Schools have a mean of 20.1% (*SD*=.22; n=58) on migrant composition with a minimum of one percent of students with a migrant background and a maximum of 95 percent.

Teachability was measured with 31 items of the 'Teachable Pupil Survey' of Kornblau (1982). It reflects teachers' perceptions of the teachability of their students. Students are perceived as teachable when teachers assume the students are able to meet the normative and academic expectations imposed on them (Author 2011a). The item scores were summed to construct a scale of teachability (ranging from 11 to 124, α =.95). Teachers in this sample scored averagely 75.26 (*SD*=13.44; *n*=1048) (Table 1).

Emotional exhaustion was measured using the Dutch version of the Maslach Burnout Inventory for teachers (Maslach & Jackson 1981; Schaufeli & van Horn 1995; Author 2015). This scale of teacher

L. Van Eycken et al.

burnout measures three dimensions: emotional exhaustion, depersonalization and reduced sense of personal accomplishment. This study will only use the dimension of emotional exhaustion, containing eight items such as '*I feel emotionally drained from my work*'. Confirmatory factor analysis (extracting one factor) revealed factor loadings ranging from .45 to .87. Cronbach's alpha equals .88. The items were summed resulting in a scale ranging from zero to 47. The mean score of teachers on emotional exhaustion was 13.09 (*SD*=6.70; *n*=1060) (Table 1).

Teacher efficacy is measured by means of the most commonly used scale: the Teachers' Sense of Efficacy Scale (TSES) (Kleinsasser 2014; Tschannen-Moran & Hoy 2001). Confirmatory factor analysis was carried out (extracting one factor) which revealed loadings ranging from .457 to .621. There was one outlier with a loading of .367 (*'How much can you assist families in helping their children do well in school?'*), but item analysis did not show a considerable improvement of Cronbach's alpha when omitting this item. Alpha for this scale was .80 (12 items). The items were summed providing a scale ranging from 22 to 96 (*SD*=8.87). The mean score of teachers on teacher efficacy was 70.24 (Table 1).

To cover more aspects of teachers' *working conditions*, a scale was created using 4 items assessing schools' infrastructure and materials. These items, such as 'The interior of the school building is satisfactory', are based on Aelterman and colleagues' (2007) subscale of wellbeing '*Infrastructure and materials*'. The items were summed creating a scale ranging from 0 to 24 with a mean score of 13.64 (*SD*=4.80; α =.72). Teachers scoring high on this scale feel more satisfied with the infrastructure of the school (Table 1).

In addition, another measurement of teachers' working conditions was created, using two items measuring teachers' perceptions of their class size, for example '*My class sizes are manageable*'. The items were based on the subscale of wellbeing '*Class size*' of Aelterman and colleagues (2007). A sum scale was created ranging from 0 to 12 with a mean score of 7.08 (*SD*=3.03; α =.86). Higher scores on this scale reflect that teachers are satisfied with the class sizes they have to manage (Table 1).

Teachers' *workload* was calculated by 6 items based on the scale used by Aelterman and colleagues (2007). An example of an item of the 'pressure of work' scale is '*I* am assigned too many tasks at school'. A sum scale was created ranging from 0 to 30 with a mean score of 15. 85 (SD=5.12; α =79).

The teachers in the sample have averagely almost 15 *years of experience* (*SD*=9.87; *n*=1225). The sample counts 355 male (29%) and 889 female (71%) teachers and 932 of all teachers (75%) in the sample have a tenured status.

Variables		N	Mea		
School level			(SD))	
		50	F 02	1	
Socioeconomic cor	nposition	59	5.03		
Migrant compositi	~	59	(.87 .20	-	
Migrant compositi	011	59	.20		
			(.22	.0)	
Teacher level					
Intentions to trans	fer	1046	1.84	1	
			(2.16	51)	
Intentions to quit		1066	1.87	'4	
			(2.12	.9)	
Teachability		1053	75.002		
			(13.92		
Emotional exhaustion		1060	13.08		
			(6.70	-	
Teacher efficacy		1222	71.41		
_ ·		4005	(9.013) 5 14.720		
Experience		1225			
Infractructure		1216	(9.87	,	
Infrastructure		1210	13.641 (4.800)		
Class size		1213	7.08		
		1215	(3.032)		
Workload		1050	15.849		
			(5.123)		
			Means	(SD)	
			Means (SD) with t-test		
			Transfer	Quit	
Sex		1244	t = .205	t = 1.638	
	Male	355	1.830 (2.115)	2.051 (2.330)	
	Female	889	1.795 (2.167)	1.787 (2.040)	
Tenured status		1237	t =508	t = -1.213	
	Yes	932	1.825 (2.176)	1.900 (2.164)	
	• •				

 No
 305
 1.738 (2.076)
 1

 Significance levels: *** $p \le .001$; ** $p \le .01$; *
 $p \le .01$; *
 $p \le .05$
1.698 (1.933)

Table 2: Pearson's correlations

	Transfer	Quit	Teachability	Efficacy	Emotional exhaustion	Experience	Infrastructure	Class size	Workload
Transfer	1								
Quit	.592 **	1							
Teachability	258 **	161 **	1						
Efficacy	166 **	206 **	.240 **	1					
Emotional exhaustion	.467 **	.514 **	270 **	213 **	1				
Experience	048	039	154 **	.042	.080 *	1			
Infrastructure	209 **	150 **	.214 **	.171 **	127 **	.096 **	1		
Class size	102 **	138 **	.123 **	.075 *	184 **	.032	.336 **	1	
Workload	.263 **	.286 **	235 **	082 **	.544 **	.099 **	130 **	171 **	1

Significance levels: ** $p \le .01$; * $p \le .05$

Analytical strategy

Since the data are a clustered sample, with teachers nested within schools, multilevel analyses are the most appropriate technique (Hox, Moerbeek, & van de Schoot 2018; Raudenbush & Bryk 2002). The analyses were conducted using MLwiN (maximum loglikelihood, version 3.04). This multilevel approach recognizes that individuals within a school may be more similar to one another than individuals in another school which may not yield independent observations (Raudenbush & Bryk 2002; Stewart 2003). Furthermore, multilevel analysis allows simultaneous examinations of individual- and school-level variance components of the dependent variable. The distributions of intentions to transfer and intentions to quit are skewed, violating the normality assumption underlying linear models. It might be more appropriate to treat intentions to transfer/quit as an event or count variable (see Stewart 2003) and carry out a negative binomial regression (Hilbe 2011; Long 1997). We compared the linear models with the negative binomial regression outcomes and since no systematic differences between the two analyses were found¹ - they led to the same conclusions - the linear multilevel models will be used in the analyses for ease of interpretation. The focal variables were added one by one in a stepwise analysis to provide an indication of existing associations between the independent variables (Baron & Kenny 1986). All metric variables were standardized to capture the effect magnitudes and missing values were deleted listwise. We distinguished two main analyses: Analysis 1 focused on teachers' intentions to transfer schools and Analysis 2 focused on teachers' intentions to guit. For each analysis an unconditional model was tested to determine the amount of variance situated at the school level.

In the first model we added the focal compositional variable, namely socioeconomic composition. In the next model we controlled for migrant composition (Mueller et al. 1999), years of experience (Boe, Bobbitt, & Cook 1997), working conditions (Boyd et al. 2011; Simon & Johnson 2015), sex (Boyd et al. 2005) and tenure (Aelterman, Engels, & Verhaeghe 2002), as research showed that these characteristics cannot be neglected (Nguyen et al. 2020). Male teachers are more likely to transfer schools than female teachers (Boyd et al. 2005) and teachers without a tenured position are often more dissatisfied with the outline of their careers (Aelterman, Engels, & Verhaeghe 2002). Previous studies indicated that teacher attrition is related to age and/or years of experience (Boe, Bobbitt, & Cook 1997). However, these studies often included early retirement in their conceptualisation of attrition and due to this found that more experienced teachers drop out more. Working conditions such as the schools' infrastructure and class size appeared to be significant contributors to teacher attrition as well (Boyd et al. 2011; Simon & Johnson 2015).

¹ The negative binomial regression output can be acquired by request.

The following three models enclosed respectively the teachers' perceptions of the students' teachability, teacher efficacy and emotional exhaustion. We added these teacher perceptions and characteristics separately to explore possible associations between the independent variables and to investigate the mechanisms that influence teachers' intention to transfer schools or to quit. The final models of teachers' intention to transfer and teachers' intention to quit result in the following equations:

 $transfer_{ij} = \beta_{0ij}cons + \beta_1SES_j + \beta_2migrant_j + \beta_3experience_{ij} + \beta_4female_{ij} + \beta_5tenured_{ij} + \beta_6infrastructure_{ij} + \beta_7classsize_{ij} + \beta_8workload_{ij} + \beta_9teachability_{ij} + \beta_{10}efficacy_{ij} + \beta_{11}EE_{ij}$

 $quit_{ij} = \beta_{0ij}cons + \beta_1 SES_j + \beta_2 migrant_j + \beta_3 experience_{ij} + \beta_4 female_{ij} + \beta_5 tenured_{ij} + \beta_6 infrastructure_{ij} + \beta_7 classsize_{ij} + \beta_8 workload_{ij} + \beta_9 teachability_{ij} + \beta_{10} efficacy_{ij} + \beta_{11} EE_{ij}$

Results

The unconditional model for teachers' intention to transfer schools showed that 6.87% of the total variance is situated at the school level (σ^2 =.069; SE=.023; χ^2 =8.706; p≤.01) (Table 3, Analysis 1). Model 1.1 showed that in high-SES schools teachers' have lower intentions to change school (β =-.14; SE=.04). Model 1.2 showed that when adding the control variables, the association between SEScomposition and intention to transfer did not persist, mostly due to adding workload to the model. Teachability perceptions significantly influence teachers' intention to transfer (β =-.18; SE=.04). Teachers show less intentions to transfer schools when they perceive the students as more teachable. In Model 1.4, as expected, teachers showed lower intentions to transfer to another school when feeling highly efficacious (β =-.10; SE=.04). This association of teacher efficacy with teachers' intention to transfer can be explained by teachers' emotional exhaustion (Model 1.5, β =.45; SE=.04). Teacher efficacy and emotional exhaustion correlate negatively, indicating that low efficacious teachers feel more emotionally exhausted, which in turn, increases the intention to transfer to another school. Additionally, the association between workload and teachers' intention to transfer can be explained by teachers' emotional exhaustion. Workload was positively correlated with teachers' emotional exhaustion and intention to transfer school (Table 2). The strong correlation between emotional exhaustion and workload (Table 2, r=0.54, p<.01), and the analysis in Model 1.5, indicated that a higher workload results in higher feelings of emotional exhaustion, which in turn, develops in stronger intentions to transfer to another school. Furthermore, more experienced teachers (β =-.10; SE=.04) and teachers less satisfied with the school's infrastructure (β =-.12; SE=.04) have more intentions to transfer schools. For teachers' sex, tenured status and class size, no associations with teachers' intention to transfer were found.

In the second analysis, the unconditional model for teachers' intention to guit education showed no significant amount of variance situated at the school level (Table 3, Analysis 2). There was no significant association between SES-composition and teachers' intention to quit (Model 2.1). Perceived teachability influences teachers' intention to quit significantly (Model 2.3): teachers have less intentions to quit when they perceive their students as teachable (β =-.13; SE=.04). When adding teacher efficacy to the model (Model 2.4), the association of teachability perceptions persisted and high efficacious teachers showed less intentions to quit (β =-.17; SE=.03). In Model 2.5, when adding emotional exhaustion, the association between teachability perceptions and teachers' intentions to quit disappeared. Given the negative correlation between teachability and emotional exhaustion, the analysis indicated that teachers perceiving their students as less teachable experience higher levels of emotional exhaustion. These higher levels of emotional exhaustion result in turn in higher intentions to quit (β =.46; SE=.04). The association of workload and teachers' intentions to quit did not persist (Model 2.5). The strong positive correlation between workload and emotional exhaustion (Table 2, r=0.54, p<.01), indicated that a higher workload accommodates higher feelings of emotional exhaustion, which in turn generates stronger intentions to quit. Furthermore, more experienced teachers showed less intentions to quit (β =-.09; SE=.04) and the associations between the focal variables remained unchanged. We found a significant association between schools' migrant composition and teachers' intention to quit, however, as there was no significant variance at the school level to explain, this association needs to be considered with caution. Teachers seem to show less intentions to quit in schools with mainly students with a migrant background, when emotional exhaustion is added to the model (β =-.09; SE=.04).

ANALYSIS 1: Teachers' intention to transfer								
Variables	Nullmodel 1.0	Model 1.1	Model 1.2	Model 1.3	Model 1.4	Model 1.5		
	в (SE)							
School level (N)	57	56	56	56	56	56		
SES-composition		144 (.043) ***	105 (.057) °	037 (.057)	046 (.056)	084 (.050)		
Migrant composition			.016 (.055)	.002 (.053)	.004 (.053)	035 (.047)		
Teacher level (N)	1046	1025	828	814	814	814		
Teachability				179 (.039) ***	155 (.039) ***	098 (.037) **		
Teacher efficacy					100 (.035) **	039 (.033)		
Emotional exhaustion						.445 (.037) ***		
Experience			084 (.039) *	107 (.039) ***	098 (.039) *	099 (.036) **		
Sex (female)			.034 (.076)	.020 (.076)	.033 (.076)	.040 (.070)		
Tenured status (yes)			.080 (.092)	.085 (.092)	.083 (.092)	.052 (.085)		
Infrastructure			166 (.038) ***	140 (.039) ***	125 (.039) ***	119 (.036) **		
Class size			014 (.036)	002 (.036)	005 (.036)	.026 (.033)		
Workload			.229 (.035) ***	.198 (.035) ***	.197 (.035) ***	034 (.033)		
Variance school level	.069 (.023) **	.046 (.019) *	.049 (.021) *	.042 (.019) *	.041 (.019) *	.027 (.015) °		
Variance teacher level	.935 (.042) ***	.946 (.043) ***	.853 (.043) ***	.839 (.043) ***	.831 (.043) ***	.711 (.036) ***		
Deviance (-2LL)	2944.685	2885.965	2250.447	2195.957	2187.772	2056.117		

ANALYSIS 2: Teachers' intention to quit								
Variables	Nullmodel 2.0 β (SE)	Model 2.1 в (SE)	Model 2.2 в (SE)	Model 2.3 в (SE)	Model 2.4 в (SE)	Model 2.5 в (SE)		
School level (N)	57	56	56	56	56	56		
SES-composition		012 (.036)	011 (.048)	.037 (.050)	.022 (.050)	023 (.042)		
Migrant composition			045 (.047)	052 (.047)	051 (.047)	090 (.040) *		
Teacher level (N)	1066	1045	842	825	825	825		
Teachability				125 (.038) ***	083 (.039) *	020 (.036)		
Teacher efficacy					170 (.034) ***	108 (.032) ***		
Emotional exhaustion						.462 (.037) ***		
Experience			091 (.039) *	105 (.039) **	091 (.039) *	089 (.036) *		
Sex (female)			111 (.075)	104 (.076)	083 (.075)	080 (.068)		
Tenured status (yes)			.136 (.092)	.148 (.092)	.143 (.091)	.112 (.083)		
Infrastructure			090 (.037) *	075 (.038) *	051 (.038)	047 (.034)		
Class size			067 (.036) °	058 (.036)	063 (.035)	035 (.032)		
Workload			.259 (.034) ***	.238 (.035) ***	.237 (.035) ***	006 (.037)		
Variance school level	.018 (.013)	.016 (.013)	.019 (.014)	.019 (.014)	.019 (.014)	.006 (.010)		
Variance teacher level	.981 (.044) ***	.993 (.044) ***	.866 (.043) ***	.859 (.044) ***	.834 (.042) ***	.707 (.036) ***		
Deviance (-2LL)	3020.985	2972.409	2283.628	2231.904	2207.777	2062.637		

Significance levels: *** p ≤ .001; ** p ≤ .01; * p ≤ .05; ° p ≤ .064

Discussion

This study aims to gain insight into the underlying mechanisms affecting teacher turnover. By combining school contextual indicators with teacher perceptions and characteristics, we tried to expose the mechanisms influencing teacher turnover, distinguishing between transferring schools and quitting teaching. Firstly, we examined possible indicators for teachers to transfer schools. Our results confirmed the importance of teachers' teachability perceptions, teacher efficacy and emotional exhaustion. Moreover, the school context and teachers' characteristics and perceptions appear to influence each other. We find that low-SES schools are indirectly related to stronger intentions to transfer, which is mostly due to the perceived workload in those schools (Diamond, Randolph and Spillane 2004). That a higher workload results in increased intentions to transfer schools appears to be due to emotional exhaustion, which is positively related to intention to transfer. Teacher efficacy also influences teachers' intention to transfer. As previous studies already stated, high efficacious teachers display less intentions to transfer. However, when taking teachers' emotional exhaustion into account, we see that emotional exhaustion seems to mediate the association between teacher efficacy and intentions to transfer. This corresponds with earlier studies which showed a strong association between high levels of teacher efficacy and feeling less emotionally exhausted (Perrachione et al. 2008). Our results add that, in turn, these lower levels of emotional exhaustion reduce teachers' intention to transfer schools.

Secondly, we focused on possible factors that influence teachers' intention to quit teaching. Schools' SES-composition did not affect teachers' intention to quit their job. Moreover, the analyses showed that the school context has little influence on quitting intentions, as there was no significant amount of variance at the school level in contrast with the models of intentions to transfer. These findings correspond with earlier findings that mobility is more strongly associated with the school context when compared to attrition (Mueller et al. 1999). Teachability perceptions influence teachers' intentions to quit, and this association goes through teachers' emotional exhaustion. Perceiving the students as less teachable is demanding for the teacher, which may lead to higher levels of emotional exhaustion. These high levels of emotional exhaustion will, in turn, heighten teachers' intention to quit. Emotional exhaustion seems to play a central role in predicting teachers' quitting behaviour, as it partially explains the association between teacher efficacy and quitting intentions as well. Highly efficacious teachers have lower intentions to quit and feel less emotionally exhausted.

These findings clearly emphasize the importance of including feelings of emotional exhaustion in studies concerning teacher turnover. Our results show that controlling for the school context, teachers' emotional exhaustion both influences teachers' intentions to transfer and to quit (see also L. Van Eycken et al.

Goddard and Goddard 2006). Other factors play out differently when looking at intentions to transfer school or intentions to quit. The socioeconomic composition of the school is more important concerning teachers' intentions to transfer compared to teachers' intentions to quit.

Including teachability perceptions, teacher efficacy and emotional exhaustion, provided insight into the underlying mechanisms of teacher turnover. Teachers' teachability perceptions of students matter in terms of turnover intentions, however mostly regarding teacher mobility. Hence, when teachers decide to transfer, the perceptions of the student body direct their choices. This might result in a decline of teachers in certain schools which can induce an unequal redistribution of teachers across schools (Goldhaber, Gross, & Player 2011). It is crucial that future research distinguishes both processes when investigating teacher turnover as previous research has shown that turnover deepens the gap of the supply of qualitative teachers between disadvantaged and more advantaged schools. Our results add that the school context affects mainly intentions to transfer, more than intentions to quit, especially when focusing on the socioeconomic composition of schools. However, this impact is mostly explained through teachers' perceived workload. Since previous research regarding the student composition and teachers' intention to transfer (and quit) is rather scattered and inconclusive, more research into the associations between schools' socioeconomic composition, perceived workload and teachers' intentions to transfer (or quit) could be useful. Clearly, teachers experience low-SES schools as more demanding, or in other words, they experience a higher workload (Diamond, Randolph and Spillane 2004). As it is not evident to alter this workload, for instance by altering the socioeconomic composition of students, teachers should be prepared and trained more to handle more demanding and diverse situations in secondary education. Current research shows that several prejudices and inaccurate perceptions are at play when educating low-SES students (Brault, Janosz & Arcambault 2014). Whereas these studies mostly indicate detrimental student outcomes, we also have to recognise the effects on teachers. Moreover, this study shows that it is not merely the workload that influences teachers' intentions to transfer, but we see that this increased workload might induce higher feelings of emotional exhaustion. Preparing teachers for more diverse and/or demanding teaching contexts might prevent those outcomes.

Although it was not the central focus of this study, we included migrant composition of the students in the analyses to check whether schools' SES-composition contributed independent from schools' migrant composition. Firstly, controlling for emotional exhaustion, we see that teachers have less intentions to quit when teaching in schools with mostly students with a migrant background. Secondly, teachers have more intentions to quit teaching when they are experiencing emotional exhaustion. Keeping in mind that teaching in schools with mostly students with a migrant background is associated with feeling more emotional exhausted (Scafidi et al. 2007), since such a teaching setting

is often perceived as more demanding (Knoblauch & Hoy 2008), we might say that when teachers would not feel more emotionally exhausted in schools with mostly students with a migrant background, they would even show less intentions to quit. Still, we must acknowledge the possibility that migrant composition might not strongly impact teachers' turnover intentions, confirming Falch and Strøm's (2005) study. The association of the schools' migrant composition is not as salient compared to the United States, where most turnover studies are conducted (e.g., Mueller et al. 1999, Scafidi et al. 2007). As Elfers and colleagues (2006) argue, in areas with a general low amount of ethnic diversity, the most notable difference between schools that are able to retain teachers and those that lose a great deal of teachers, is the poverty rate among students in the school.

In terms of teacher quantity and quality, teacher turnover is leading to a shortage of teachers in order to provide education for students. However, in terms of educational quality, teacher attrition can be beneficial if incompetent teachers leave the profession. This study indicated that teachers who feel emotionally exhausted, low efficacious teachers, and teachers who perceive their students as less teachable are more likely to change school. This finding is mostly interpreted as an unfavourable result. One could argue, however, that when teachers with these less beneficial characteristics leave their school, this might benefit the educational quality in those schools. Nevertheless, this interpretation could be a strong simplification of the underlying mechanisms. For example, feelings of efficacy can increase and levels of emotional exhaustion can drop (Skaalvik & Skaalvik 2016), so when teachers with these feelings leave, there is a missed opportunity for schools to enable teachers to grow within their job. Lankford, Loeb and Wyckoff (2002) demonstrated that teachers who leave poor urban schools have better teaching skills than those who stay in their schools. Thus, not only the mere quantity of teachers who leave matters for educational quality, but the teaching quality of teachers with intentions to leave, or those who actually leave, is also imperative for future research (Johnson, Sullivan, & Simons 2019).

In terms of policy measures, teachers should be supported to deal with the so-called mismatch between students and teachers, especially by providing them tools to deal with students who live in poverty (Haberman 2010; Kopetz et al. 2006). Teacher education programmes should provide better guidance on that point in particular, because preservice teachers are often inadequately prepared to work in more challenging school contexts (Song & Christiansen 2001). More internships in challenging school settings may decrease negative perceptions of low-SES students, as this study also shows that low-SES schools suffer from negative stereotypes regarding their student populations, in the sense that their students are perceived as less teachable by teachers. Hoy (1990), for example, suggests that principals and school administrators should be more aware of teachers' perceptions about the student population and consider teachers' perceptions about the student population of the school when hiring them.

Limitations

Since we used a cross-sectional study design, our results were limited to associations, while longitudinal research could contribute to better understanding causality for variables such as workload, efficacy, emotional exhaustion and teachability. The data did not allow to include more personal characteristics of the teacher, such as their geographical location and teachers' own ethnicity. Moreover, we could not observe whether the teachers actually changed their school or quit their job. The data was limited to the intentions to transfer or quit. Future studies should replicate the present findings with more objective outcomes (cf. actual teacher retention, Henke, Zahn, & Carroll 2001). Still, these intentions are an important indicator: growing intentions to leave the profession may result in actually leaving. Furthermore, growing intentions to leave is likely to influence teachers' relationship with students and colleagues, their work engagement and overall, their teaching quality (Skaalvik & Skaalvik 2011). Some studies question whether intentions correctly predict turnover behaviour, as DeAngelis and colleagues (2013) show that only a fraction of teachers with the intent to leave, actually left two years later. Therefore, it is sometimes inconclusive whether there is a strong and direct correlation between intentions to leave and actual turnover (Lee & Whitford 2008). It is essential to acknowledge that determinants of turnover intentions and actual turnover may vary. Nevertheless, despite research recognizing these possible differences, it concludes that turnover intentions are still the most reliable proxy (Harrison, Newman, & Roth 2006). Moreover, even if turnover intentions do not result in teachers leaving the school or profession, they still reflect feelings very likely to affect teachers' mental health conditions and to reduce their work performances (Ladd 2011; Saeed et al. 2014).

Lastly, the socioeconomic composition in Flemish schools is highly associated with the rigid tracking system, which greatly determines students' performances (Author 2004). Students in lower tracks tend to achieve less than students in higher tracks, regardless of their personal ability. Studies have shown that teachers in lower tracks are less academically oriented than those in higher tracks, because they have a lower opinion of their students. Moreover, teachers tend to stay in schools where students achieve better results (Boyd et al. 2009). In Flanders, those schools mostly offer academic tracks and are mostly high-SES schools. Because of the very high correlation between the SES-composition, school tracks and student performance in Flemish schools, we were not able to distinguish these associations. However, it seems that student performance has a reciprocal relationship with teacher turnover: When student performance is low, teachers increasingly leave, but when teachers leave schools, there is again a decrease in student performance (Ronfeldt et al. 2013).

Future research should include the consequences of teacher mobility and attrition on students' learning. For example, teacher attrition can be problematic as it reduces instructional continuity, which in turn, has a negative impact on students' learning and development (Kelchtermans 2017).

Conclusion

Considering both intentions to transfer and to quit schools, we conclude that individual teacher characteristics outweigh external factors, such as schools' student composition. The influence of schools' socioeconomic composition is rather limited when teachers' perceived workload is taken into account. However, we would still like to emphasize the importance of schools' compositional factors, as teachers are not isolated from the situational context in which they find themselves, especially regarding teacher mobility. Unlike previous studies on teachers' intentions to transfer or quit, this study demarcates the contextual predictors and more internal processes. Teachability perceptions, teacher efficacy and emotional exhaustion appear to be crucial teacher characteristics regarding teachers' intention to transfer or quit schools. We showed that these characteristics are all mutually associated with each other, which resulted in directly or indirectly influencing teachers' intentions to transfer or quit. Teacher efficacy and teachability perceptions showed to be important predictors of teachers' turnover intentions in general, although these associations are (partly) explained through teachers' emotional exhaustion.

Notes on contributors

Lennart Van Eycken is a PhD student and teaching assistant working for the research team CuDOS (Cultural Diversity: Opportunities and Socialization) at the Department of Sociology, Ghent University, Belgium. His research focuses on school compositional effects on teacher efficacy, including teacher perceptions and gender stereotypes. **ORCID**: <u>http://orcid.org/0000-0001-9559-9404</u>

Ama Amitai is a doctor in Sociology who worked for the research team CuDOS (Cultural Diversity: Opportunities and Socialization) at the Department of Sociology, Ghent University, Belgium. Her research focused on the role of schools in teacher wellbeing and turnover. **ORCID**: http://orcid.org/0000-0003-0874-6387

Mieke Van Houtte is a full professor of sociology and the head of the research team CuDOS at the Department of Sociology, Ghent University, Belgium. Her research is situated within the sociology of education, including sexual minorities and the effects of structural and compositional school features on diverse outcomes for students and teachers. **ORCID:** <u>http://orcid.org/0000-0002-5425-6138</u>

References

- Acker, G. M. 2004. The effect of organizational conditions (role conflict, role ambiguity, opportunities for professional development, and social support) on job satisfaction and intention to leave among social workers in mental health care. *Community Mental Health Journal*, 40(1), 65–73.
- Aelterman, A, Engels, N., & Verhaeghe, J. P. 2002. Het welbevinden van de leerkracht: de ontwikkeling van een bevragingsinstrument voor het meten van het welbevinden van leerkrachten basis-en secundair onderwijs (OBPWO 00.06). *Brussel/Gent: Vrije Universiteit Brussel, Universiteit Gent*.
- Aelterman, Antonia, Engels, N., Van Petegem, K., & Verhaeghe, J. P. 2007. The Well-being of Teachers in Flanders: The Importance of a Supportive School Culture. *Educational Studies*, *33*(3), 285– 298.
- Ajzen, I., Czasch, C., & Flood, M. G. 2009. From Intentions to Behavior: Implementation Intention, Commitment, and Conscientiousness. *Journal of Applied Social Psychology*, 39(6), 1356-1372.
- Amitai, A. 2021. "Teachers Throwing in the Towel : The Role of the School in Teacher Wellbeing and Turnover." Universiteit Gent.
- Armor, D., Conry-Oseguera, P., Cox, M., Nicelma, K., McDonnell, L., Pascal, A., ... Zellman, G. 1976.
 Analysis of the school preferred reading program in selected Los Angeles minority schools.
 https://doi.org/Eric Document service No. 130 243
- Bandura, A. 1997. Self-efficacy: The exercise of control. New York: W.H. Freeman and Company.
- Baron, R. M., & Kenny, D. A. 1986. The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182.
- Boe, E. E., Bobbitt, S. A., & Cook, L. H. 1997. Whither didst thou go? Retention, reassignment, migration, and attrition of special and general education teachers from a national perspective. *The Journal of Special Education*, *30*(4), 371–389.
- Boe, E. E., Cook, L. H., & Sunderland, R. J. 2008. Teacher turnover: Examining exit attrition, teaching area transfer, and school migration. *Exceptional Children*, *75*(1), 7–31.
- Borman, G. D., & Dowling, N. M. 2008. Teacher attrition and retention: A meta-analytic and narrative review of the research. *Review of educational research*, 78(3), 367-409.
- Boyd, D. J., Grossman, P. L., Lankford, H., Loeb, S., & Wyckoff, J. 2009. Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis*, *31*(4), 416–440.

- Boyd, D., Grossman, P., Ing, M., Lankford, H., Loeb, S., & Wyckoff, J. 2011. The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, 48(2), 303–333.
- Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. 2008. *Who leaves? Teacher attrition and student achievement*. National Bureau of Economic Research.
- Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. 2005. Explaining the short careers of high-achieving teachers in schools with low-performing students. *American Economic Review*, *95*(2), 166–171.
- Brault, M., Janosz, M., Archambault, I. 2014. Effects of school composition and school climate on teacher expectations of students: A multilevel analysis. *Teaching and Teacher Education, 44*, 148-159. doi:10.1016/j.tate.2014.08.008
- Chang, M. L. 2009. An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review*, 21(3), 193-218.
- Clandinin, D. J., Downey, C. A., & Huber, J. 2009. Attending to changing landscapes: Shaping the interwoven identities of teachers and teacher educators. *Asia-Pacific journal of teacher education*, 37(2), 141-154.
- Coladarci, T. 1992. Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education*, *60*(4), 323–337. https://doi.org/10.1080/00220973.1992.9943869
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. 2003. The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, *88*(1), 160.
- Dalton, D. R., Johnson, J. L., & Daily, C. M. 1999. On the use of" intent to..." variables in organizational research: An empirical and cautionary assessment. *Human Relations*, 52(10), 1337-1350.
- DeAngelis, K. J., Wall, A. F., & Che, J. 2013. The impact of preservice preparation and early career support on novice teachers' career intentions and decisions. *Journal of teacher education*, 64(4), 338-355.
- Delpit, L. 2006. Other people's children: Cultural conflict in the classroom. The New Press.
- Demanet, J. 2013. "We Don't Need No Education! A Multilevel Inquiry into the Compositional and Cultural School Determinants of School Misconduct." Universiteit Gent.

- Demanet, J., and M. Van Houtte. 2012. "Teachers' Attitudes and Students' Opposition. School
 Misconduct as a Reaction to Teachers' Diminished Effort and Affect." *Teaching and Teacher Education* 28 (6): 860–869. doi:10.1016/j.tate.2012.03.008.
- Diamond, J. B., Randolph, A., & Spillane, J. P. 2004. Teachers' Expectations and Sense of Responsibility for Student Learning: The Importance of Race, Class, and Organizational Habitus. *Anthropology & Education Quarterly*, 35(1), 75–98. https://doi.org/10.1525/aeq.2004.35.1.75
- Dicke, T., Parker, P. D., Marsh, H. W., Kunter, M., Schmeck, A., & Leutner, D. 2014. Self-efficacy in classroom management, classroom disturbances, and emotional exhaustion: A moderated mediation analysis of teacher candidates. *Journal of Educational Psychology*, *106*(2), 569– 583. https://doi.org/10.1037/a0035504
- Djonko-Moore, C. M. 2016. An exploration of teacher attrition and mobility in high poverty racially segregated schools. *Race Ethnicity and Education*, *19*(5), 1063–1087. https://doi.org/10.1080/13613324.2015.1013458
- Dworkin, A. G. 1987. *Teacher burnout in the public schools: Structural causes and consequences for children*. Suny Press.
- Elfers, A. M., Plecki, M. L., & Knapp, M. S. 2006. Teacher Mobility: Looking More Closely at "The Movers" Within a State System. *Peabody Journal of Education*, 81(3), 94–127. https://doi.org/10.1207/s15327930pje8103
- Entwisle, D. R., & Alexander, K. L. 1993. Entry into school: The beginning school transition and educational stratification in the United States. *Annual Review of Sociology*, *19*(1), 401–423.
- Erikson, R., Goldthorpe, J. H., & Portocarero, L. 1979. Intergenerational class mobility in three
 Western European societies: England, France and Sweden. *The British Journal of Sociology*, 30(4), 415–441.
- Evers, W. J. G., Brouwers, A., & Tomic, W. 2002. Burnout and self-efficacy: A study on teachers' beliefs when implementing an innovative educational system in the Netherlands. *British Journal of Educational Psychology*, *72*(2), 227–243.
- Falch, T., & Strøm, B. 2005. Teacher turnover and non-pecuniary factors. *Economics of Education Review*, 24(6), 611–631.
- Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. 2001. Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research*, *71*(2), 279–320.

- Glickman, C. D., & Tamashiro, R. T. 1982. A comparison of first-year, fifth-year, and former teachers on efficacy, ego development, and problem solving. *Psychology in the Schools*, *19*(4), 558– 562.
- Goddard, R. D., & Skrla, L. 2006. The influence of school social composition on teachers' collective efficacy beliefs. *Educational Administration Quarterly*, *42*(2), 216–235. https://doi.org/10.1177/0013161X05285984
- Goddard, R. D., Salloum, S. J., & Berebitsky, D. 2009. Trust as a mediator of the relationships between poverty, racial composition, and academic achievement: Evidence from Michigan's public elementary schools. *Educational Administration Quarterly*, 45(2), 292–311.
- Goddard, R. D., Tschannen-Moran, M., & Hoy, W. K. 2001. A Multilevel Examination of the Distribution and Effects of Teacher Trust in Students and Parents in Urban Elementary Schools. *The Elementary School Journal*, *102*(1), 3. https://doi.org/10.1086/499690
- Goddard, R., & Goddard, M. 2006. Beginning teacher burnout in Queensland schools: associations with serious intentions to leave. *The Australian Educational Researcher*, *33*(2), 61-75.
- Goldhaber, D., Gross, B., & Player, D. 2011. Teacher career paths, teacher quality, and persistence in the classroom: Are public schools keeping their best? *Journal of Policy Analysis and Management*, *30*(1), 57–87.
- Gray, L., & Taie, S. 2015. Public School Teacher Attrition and Mobility in the First Five Years: Results from the First through Fifth Waves of the 2007-08 Beginning Teacher Longitudinal Study. First Look. Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved from http://nces.ed.gov/pubs2015/2015337.pd
- Griffeth, R. W., Hom, P. W., & Gaertner, S. 2000. A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26(3), 463-488.
- Gutentag, T., Horenczyk, G., & Tatar, M. 2018. Teachers' approaches toward cultural diversity predict diversity-related burnout and self-efficacy. *Journal of Teacher Education*, *69*(4), 408–419.

Haberman, M. 2005. Teacher burnout in black and white. *The New Educator*, 1(3), 153–175.

Haberman, M. 2010. The pedagogy of poverty versus good teaching. Phi Delta Kappan, 92(2), 81–87.

Hackett, R. D., Lapierre, L. M., & Hausdorf, P. A. 2001. Understanding the links between work commitment constructs. *Journal of Vocational Behavior*, *58*(3), 392–413.

- Hanushek, E. A., Kain, J. F., & Rivkin, S. G. 2004. Why Public Schools Lose Teachers. *Journal of Human Resources, XXXIX*(2), 326–354. https://doi.org/10.3368/jhr.XXXIX.2.326
- Hanushek, E. A., Schwerdt, G., Wiederhold, S., & Woessmann, L. 2015. Returns to skills around the world: Evidence from PIAAC. *European Economic Review*, *73*, 103–130.
- Harrell, P. E., Thompson, R., & Brooks, K. 2019. Leaving schools behind: The impact of school student body and working conditions on teacher retention and migration. *Journal of Science Teacher Education*, *30*(2), 144–158.
- Harrison, D. A., Newman, D. A., & Roth, P. L. 2006. How important are job attitudes? Meta-analytic comparisons of integrative behavioral outcomes and time sequences. Academy of Management journal, 49(2), 305-325.
- Henke, R., Zahn, L., & Carroll, D. 2001. Attrition of new teachers among recent college graduates.Washington, DC: National Center for Education Statistics.

Hilbe, J. M. 2011. Negative binomial regression. Cambridge University Press.

- Holme, J. J., & Rangel, V. S. 2012. Putting School Reform in Its Place: Social Geography, Organizational Social Capital, and School Performance. *American Educational Research Journal*, 49(2), 257– 283. https://doi.org/10.3102/0002831211423316
- Holme, J. J., Jabbar, H., Germain, E., & Dinning, J. 2018. Rethinking Teacher Turnover: Longitudinal Measures of Instability in Schools. *Educational Researcher*, 47(1), 62–75. https://doi.org/10.3102/0013189x17735813
- Hox, J. J., Moerbeek, M., & van de Schoot, R. 2018. *Multilevel Analysis: Techniques and Applications* (*Third Edition*). New York: Routledge.
- Hoy, W. K. 1990. Organizational climate and culture: A conceptual analysis of the school workplace. Journal of Educational and Psychological Consultation, 1(2), 149–168.
- Hughes, G. D. 2012. Teacher Retention: Teacher Characteristics, School Characteristics,
 Organizational Characteristics, and Teacher Efficacy. *The Journal of Educational Research*,
 105(4), 245–255. https://doi.org/10.1080/00220671.2011.584922
- Imazeki, J. 2005. Teacher salaries and teacher attrition. *Economics of Education Review*, 24(4), 431-449.
- Ingersoll, R. M. 2001. Teacher Turnover and Teacher Shortages: An Organizational Analysis. *American Educational Research Journal*, *38*(3), 499–534.

Ingersoll, R. M. 2003. Is there really a teacher shortage?

- Jennett, H. K., Harris, S. L., & Mesibov, G. B. 2003. Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of Autism and Developmental Disorders*, 33(6), 583–593.
- Johnson, B., Sullivan, A., & Simons, M. 2019. Teacher Retention: Some Concluding Thoughts. In *Attracting and Keeping the Best Teachers* (pp. 211–220). Springer.
- Johnsrud, L. K., & Rosser, V. J. 2002. Faculty members' morale and their intention to leave: A multilevel explanation. *The Journal of Higher Education*, *73*(4), 518–542.
- Kapadia, K., Coca, C., & Easton, J. Q. 2007. Keeping new teachers: A first look at the influences of induction in the Chicago Public Schools. Chicago, IL: Consortium on Chicago School Research. Retrieved from http://ccsr.uchicago.edu/publications/ keeping_new_teachers012407.pdf
- Karsten, S., Ledoux, G., Roeleveld, J., Felix, C., & Elshof, D. 2003. School choice and ethnic segregation. *Educational Policy*, *17*(4), 452–477.
- Kelchtermans, G. 2017. 'Should I stay or should I go?': unpacking teacher attrition/retention as an educational issue. *Teachers and Teaching: Theory and Practice*, 23(8), 961–977. https://doi.org/10.1080/13540602.2017.1379793
- Khamis, M. 2000. The beginning teacher. In S. Dinham & C. Scott (Eds.), *Teaching in context* (pp. 1– 17). Camberwell: ACER Press.
- Kleinsasser, R. C. 2014. Teacher efficacy in Teaching and Teacher Education. *Teaching and Teacher Education*, 44, 168–179. https://doi.org/10.1016/j.tate.2014.07.007
- Knoblauch, D., & Hoy, A. W. 2008. "Maybe I can teach those kids." The influence of contextual factors on student teachers' efficacy beliefs. *Teaching and Teacher Education*, 24(1), 166–179. https://doi.org/10.1016/j.tate.2007.05.005
- Kopetz, P. B., Lease, A. J., & Warren-Kring, B. Z. 2006. Comprehensive urban education. Allyn & Bacon.
- Kornblau, B. 1982. The teachable pupil survey: A technique for assessing teachers' perceptions of pupil attributes. *Psychology in the Schools*, *19*(2), 170–174.
- Kraft, M. A., Papay, J. P., Johnson, S. M., Charner-Laird, M., Ng, M., & Reinhorn, S. 2015 Educating amid uncertainty: The organizational supports teachers need to serve students in highpoverty, urban schools. *Educational Administration Quarterly*, 51(5), 753–790.
- Ladd, H. F. 2011. Teachers' perceptions of their working conditions: How predictive of planned and actual teacher movement? *Educational Evaluation and Policy Analysis*, 33(2), 235-261.

- Lankford, H., Loeb, S., & Wyckoff, J. 2002. Teacher sorting and the plight of urban schools: A descriptive analysis. *Educational Evaluation and Policy Analysis*, *24*(1), 37–62.
- Lazarus, R. S., & Folkman, S. 1984. Stress, appraisal, and coping. Springer publishing company.
- Lee, S. Y., & Whitford, A. B. 2008. Exit, voice, loyalty, and pay: Evidence from the public workforce. Journal of Public Administration Research and Theory, 18(4), 647-671.
- Long, J. S. 1997. *Regression models for categorical and limited dependent variables*. Thousand Oaks, CA: Sage
- Maslach, C., & Jackson, S. E. 1981. The measurement of experienced burnout. *Journal of Organizational Behavior*, *2*(2), 99–113.
- Mueller, C. W., Finley, A., Iverson, R. D., & Price, J. L. 1999. The effects of group racial composition on job satisfaction, organizational commitment, and career commitment: The case of teachers.
 Work and Occupations, 26(2), 187–219.
- Nguyen, T. D., Lam, D. P., Crouch, M., & Springer, M. G. 2020. The correlates of teacher turnover: An updated and expanded Meta-analysis of the literature. *Educational Research Review*, 31.
- Nusche, D., Miron, G., Santiago, P., & Teese, R. 2015. *OECD reviews of school resources: Flemish community of Belgium 2015*. OECD Publishing.
- OECD. 2017. Education Policy Outlook Belgium. Paris, OECD Publishing. Retrieved OECD Website:http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Belgium.pdf
- Omenn Strunk, K., & Robinson, J. P. 2006. Oh, won't you stay: A multilevel analysis of the difficulties in retaining qualified teachers. *Peabody Journal of Education*, *81*(4), 65–94.
- Perrachione, B. A., Rosser, V. J., & Petersen, G. J. 2008. Why Do They Stay? Elementary Teachers' Perceptions of Job Satisfaction and Retention. *Professional Educator*, *32*(2).
- Poulou, M. 2007. Personal teaching efficacy and its sources: Student teachers' perceptions. *Educational Psychology*, 27(2), 191–218. https://doi.org/10.1080/01443410601066693
- Räsänen, K., Pietarinen, J., Pyhältö, K., Soini, T., & Väisänen, P. 2020. Why leave the teaching profession? A longitudinal approach to the prevalence and persistence of teacher turnover intentions. *Social Psychology of Education*, 23(3), 837-859.
- Raudenbush, S. W., & Bryk, A. S. 2002. *Hierarchical linear models: Applications and data analysis methods* (Vol. 1). Sage Publications.

- Ronfeldt, M., Loeb, S., & Wyckoff, J. 2013. How teacher turnover harms student achievement. *American Educational Research Journal*, *50*(1), 4–36.
- Rumberger, R. W., & Palardy, G. J. 2005. Does segregation still matter? The impact of student composition on academic achievement in high school. *Teachers College Record*, 107(9), 1999–2045. https://doi.org/10.1111/j.1467-9620.2005.00583.x
- Saeed, I., Waseem, M., Sikander, S., & Rizwan, M. 2014. The relationship of turnover intention with job satisfaction, job performance, leader member exchange, emotional intelligence and organizational commitment. *International Journal of Learning and Development*, 4(2), 242-256.
- Sass, D. A., Seal, A. K., & Martin, N. K. 2011. Predicting teacher retention using stress and support variables. *Journal of Educational Administration*, 49(2), 200–215. https://doi.org/10.1108/0957823111116734
- Scafidi, B., Sjoquist, D. L., & Stinebrickner, T. R. 2007. Race, poverty, and teacher mobility. *Economics* of Education Review, 26(2), 145–159. https://doi.org/10.1016/j.econedurev.2005.08.006
- Schaufeli, W. B., & van Horn, J. E. 1995. *Maslach Burnout Inverntory Voor Leraren (MBI-NL-Le)[Maslach Burnout Inventory for Teachers, Dutch Version] Provisional Manual*. Universiteit Utrecht, PAGO, Utrecht.
- Simon, N. S., & Johnson, S. M. 2015. Teacher Turnover in High-Poverty Schools: What We Know and Can Do. *Teachers College Record*, *117*(3), 1–36.
- Skaalvik, E. M., & Skaalvik, S. 2007. Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology*, 99(3), 611–625. https://doi.org/10.1037/0022-0663.99.3.611
- Skaalvik, E. M., & Skaalvik, S. 2010. Teacher self-efficacy and teacher burnout: A study of relations.
 Teaching and Teacher Education, 26(4), 1059–1069.
 https://doi.org/10.1016/j.tate.2009.11.001
- Skaalvik, E. M., & Skaalvik, S. 2011. Teacher job satisfaction and motivation to leave the teaching profession: Relations with school context, feeling of belonging, and emotional exhaustion.
 Teaching and Teacher Education, 27(6), 1029–1038.
 https://doi.org/10.1016/j.tate.2011.04.001
- Skaalvik, E. M., & Skaalvik, S. 2016. Teacher stress and teacher self-efficacy as predictors of engagement, emotional exhaustion, and motivation to leave the teaching profession. *Creative Education*, 7(13), 1785.

Song, K. H., & Christiansen, F. 2001. Achievement Gaps in Pre-Service Teachers in Urban Settings.

- Stewart, E. A. 2003. School social bonds, school climate, and school misbehavior: A multilevel analysis. *Justice Quarterly*, 20, 575-604.
- Struyven, K., & Vanthournout, G. 2014. Teachers' exit decisions: An investigation into the reasons why newly qualified teachers fail to enter the teaching profession or why those who do enter do not continue teaching. *Teaching and Teacher Education*, *43*, 37–45.
- Tenenbaum, H. R., & Ruck, M. D. 2007. Are teachers' expectations different for racial minority than for European American students? A meta-analysis. *Journal of Educational Psychology*, 99(2), 253.
- Thrupp, M. 1999. Schools making a difference: school mix, school effectiveness, and the social limits of reform. McGraw-Hill Education (UK).
- Timmerman, C., Hermans, P., & Hoornaert, J. 2002. *Allochtone jongeren in het onderwijs. Een multidisciplinair perspectief*. Leuven-Apeldoorn: Garant.
- Tiplic, D., Brandmo, C., & Elstad, E. 2015. Antecedents of Norwegian beginning teachers' turnover intentions. *Cambridge Journal of Education*, 45(4), 451-474.
- Tschannen-Moran, M., & Hoy, A. W. 2001. Teacher efficacy: Capturing an elusive construct. *Teaching* and Teacher Education, 17(7), 783–805. https://doi.org/10.1016/S0742-051X(01)00036-1
- Tsouloupas, C. N., Carson, R. L., Matthews, R., Grawitch, M. J., & Barber, L. K. 2010. Exploring the association between teachers' perceived student misbehaviour and emotional exhaustion:
 The importance of teacher efficacy beliefs and emotion regulation. *Educational Psychology*, 30(2), 173–189.
- Van Houtte, M. 2003. "Reproductietheorieën Getoetst: De Link Tussen SES-compositie van de School En Onderwijscultuur van Leerkrachten En Directie." *Mens En Maatschappij* 78 (2): 119–143.
- Van Houtte, M. 2004. "Why Boys Achieve Less at School than Girls: The Difference between Boys' and Girls' Academic Culture." *Educational Studies* 30 (2): 159–173. doi:10.1080/0305569032000159804.
- Van Houtte, M. 2016. "Lower-track Students' Sense of Academic Futility: Selection or Effect?" *Journal of Sociology* 52 (4): 874–889. doi:10.1177/1440783315600802.
- Van Maele, D., and M. Van Houtte. 2009. "Faculty Trust and Organizational School Characteristics: An Exploration across Secondary Schools in Flanders." *Educational Administration Quarterly* 45 (4): 556–589. doi:10.1177/0013161X09335141.

- Van Maele, D., and M. Van Houtte. 2011a. "Collegial Trust and the Organizational Context of the Teacher Workplace: The Role of a Homogeneous Teachability Culture." *American Journal of Education* 117 (4): 437–464. doi:10.1086/660754.
- Van Maele, D., and M. Van Houtte. 2011b. "Teacher Trust in Students in Technical/Vocational Schools versus Academic Schools and the Role of Teacher Perception of Students' Teachability." In *Psychology of Trust*, edited by B. R. Curtis, 117–135, Nova Science Publishers.
- Van Maele, D., and M. Van Houtte. 2015. "Trust in School: A Pathway to Inhibit Teacher Burnout?" Journal of Educational Administration 53 (1): 93–115.doi:10.1108/JEA-02-2014-0018.
- Vantieghem, W. 2016. *Gender goes to school: The influence of gender norms on early adolescents' school functioning.* Universiteit Gent. Faculteit Politieke en Sociale Wetenschappen.
- Wynn, S. R., Carboni, L. W., & Patall, E. A. 2007. Beginning teachers' perceptions of mentoring, climate, and leadership: Promoting retention through a learning communities perspective. *Leadership and Policy in Schools*, *6*(3), 209–229.