Trust in school: a pathway to inhibit teacher burnout?

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Abstract

Purpose – The purpose of this paper is to consider trust as an important relational source in schools by exploring whether trust lowers teacher burnout. The authors examine how trust relationships with different school parties such as the principal relate to distinct dimensions of teacher burnout. The authors further analyze whether school-level trust additionally influences burnout. In doing this, the authors account for other teacher and school characteristics.

Design/methodology/approach – The authors use quantitative data gathered during the 2008-2009 school year from 673 teachers across 58 elementary schools in Flanders (i.e. the northern Dutch-speaking region of Belgium). Because teacher and school characteristics are simultaneously related to burnout, multilevel modeling is applied.

Findings – Trust can act as a buffer against teacher burnout. Teachers' trust in students demonstrates the strongest association with burnout compared to trust in principals or colleagues. Exploring relationships of trust in distinct school parties with different burnout dimensions yield interesting additional insights such as the specific importance of teacher-principal trust for teachers' emotional exhaustion. Burnout is further an individual teacher matter to which school-level factors are mainly unrelated.

Research limitations/implications – Principals fulfill an important role in inhibiting emotional exhaustion among teachers. They are advised to create a school atmosphere that is conducive for different kinds of trust relationships to develop. Actions to strengthen trust and inhibit teacher burnout are necessary, although further qualitative and longitudinal research is desirable.

Originality/value – This paper offers a unique contribution by examining trust in different school parties as a relational buffer against teacher burnout. It indicates that principals can affect teacher burnout and prevent emotional exhaustion by nurturing trusting relationships in school.

Keywords Teachers, Burnout, Belgium, Trust, Emotional exhaustion, Elementary school

Paper type Research paper

Introduction

Burnout is a crucial construct in understanding job-related stress processes and has been identified as an important predictor of employee turnover. In addition, the literature indicates that burnout contributes to employees' intentions to quit the job across different organizational settings, including teaching (Chang, 2009; Cordes and Dougherty, 1993; Jackson *et al.*, 1986; Maslach *et al.*, 2001). Burnout therefore contributes to teacher attrition, which is currently considered as an important educational challenge worldwide (Cha and Cohen-Vogel, 2011; Kukla-Acevedo, 2009; Keigher, 2010). In Flanders (i.e. the northern Dutch-speaking region of Belgium) where the present study has been conducted, the educational system is challenged by a high number of retiring teachers and by a substantial percentage of beginning teachers who leave the profession. For example, 14 percent of the teachers in elementary education and 22 percent in secondary education leave the profession within the first five years (Flemish Ministry of Education and Training, 2013). In counterbalancing educational issues related to teacher turnover, the topic of retaining teachers has received broad

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scholarly attention (e.g. Guarino *et al.*, 2006; Müller *et al.*, 2009) – attention that is welcome because a direct and negative effect of teacher turnover on student achievement has recently been demonstrated across a large-scale empirical study (Ronfeldt *et al.*, 2013). In order to keep teachers in their job, those who manage the teaching profession should therefore understand which factors contribute to attrition-inducing job attitudes such as burnout.

The general aim of the study is to investigate whether teachers' trust in other parties at school such as the principal or colleagues antecedes burnout. Exploring antecedents of job burnout necessitates a focus on social relationships within the work environment because burnout is mainly considered a prolonged response to interpersonal stressors in the job (Maslach *et al.*, 2001). Across organizational settings, the nature of social relationships may indeed expand, or reduce an employee's capacity for managing workplace stress (Freeney and Fellenz, 2013; Karasek *et al.*, 1982). For teachers, involvement in the social system of the school is an inherent aspect of the job because they are dependent on their interactions with other school members to be successful in accomplishing their teaching goals (see Bryk and Schneider, 2002; Forsyth *et al.*, 2011; Nias, 2005). This relational interdependence explains why trust can be viewed as a key characteristic of teachers' social relationships within the complex work environment of the school, one that supports teacher and school effectiveness (Forsyth *et al.*, 2011; Van Maele *et al.*, 2014). Trust is an essential characteristic of stable social relationships (Blau, 1986) and in situations of interdependence it reduces uncertainty and enhances cooperation (see Gambetta, 1988; Luhmann, 1979; Rousseau *et al.*, 1998). Trust might accordingly affect teachers' state of mind in doing their job. To be sure, as a teacher being dependent on other school parties to accomplish your teaching goals but at the same time not being able to trust those parties is not conducive to the development of positive job attitudes.

Seeking to expand previous studies, which have demonstrated the importance of trust for teachers' job attitudes, and role performance (e.g. Lee *et al.*, 2011; Price, 2012; Tschannen-Moran, 2009; Van Maele and Van Houtte, 2012), we consider the role of trust in explaining teachers' level of job burnout. Although there has recently been light shed on a trust-burnout association in teaching (e.g. Dworkin and Tobe, 2014; Timms *et al.*, 2007), it still remains unexplored how trust in specific (groups of) school members, at multiple levels, relate to specific dimensions of teacher burnout. Our study therefore adds two salient contributions to the extant research. First, it considers teachers' trust in various school parties (principals, students, or colleagues) and how that trust associates with distinct components of teacher burnout, namely, emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment (see Maslach *et al.*, 2001). Second, not only can trust be viewed as an individual teacher feature but also as a collective faculty feature, i.e. faculty trust. Faculty trust is regarded as an organizational school property and is usually approached by taking the average levels of trust as perceived or experienced by the faculty (see Forsyth *et al.*, 2011; Van Maele *et al.*, 2014). We additionally investigate whether the level of faculty trust affects teacher burnout above and beyond a possible influence of individual teacher trust because both individual and organizational characteristics have been indicated as anteceding employee burnout (Maslach *et al.*, 2001).

In paying attention to how trust in distinct school parties at both the teacher and faculty level relate to distinct components of teacher burnout, the present study contributes in a unique way to both the literature that deals with the importance of trust in schools (e.g. Adams and Forsyth, 2013; Bryk and Schneider, 2002;

Tschannen-Moran, 2004; Van Maele *et al.*, 2014), and to the literature investigating antecedents of teacher burnout (e.g. Chang, 2009; Pas *et al.*, 2012). In this way, the study presents an original investigation of a trust-burnout association within the teaching job.

Teacher burnout as a concept

Research into the burnout phenomenon has its roots in human service professions such as nursing, social work, and teaching. The development of the Maslach Burnout Inventory (MBI) by Maslach and Jackson (1981) introduced the start of systematical empirical inquiry into employee burnout. Maslach's framework conceptualizes job burnout as a psychological syndrome in response to chronic emotional and interpersonal stressors on the job. Burnout is considered as a prolonged response to these stressors and is defined by three key dimensions: emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment (Cordes and Dougherty, 1993; Maslach *et al.*, 2001). There are thus three components of teacher burnout which can be distinguished from one another. Others approach burnout as a factor that arises from alienation at work through the conjoined effects of powerlessness, normlessness, meaninglessness, isolation, self-estrangement, and cultural estrangement (Dworkin and Tobe, 2014). The multidimensional three-component approach of burnout as assessed by the MBI-scale has, however, become the dominant framework for studying the phenomenon within the teaching profession (see Byrne, 1993; Chang, 2009). Emotional exhaustion is the core element of burnout and the most obvious manifestation of it. It reflects the stress dimension of burnout and is described as a lack of energy and a feeling that one's emotional resources are used up (Chang, 2009; Maslach *et al.*, 2001). It is a critical aspect of teacher functioning in school as it prompts actions to distance oneself emotionally and cognitively from one's work (Cordes and Dougherty, 1993; Maslach *et al.*, 2001). The second dimension of burnout, depersonalization, indicates indifference to clients, co-workers, and the organization. Treating clients but also colleagues as objects rather than people is an attempt to distance oneself from work and the people one works with. It is mainly viewed as an immediate reaction to exhaustion (Maslach *et al.*, 2001). Depersonalization might hamper learning processes in school given that teachers' personal regard for others is viewed as an important aspect of schooling and learning (Bryk and Schneider, 2002). The third MBI-dimension, reduced personal accomplishment, reflects a decline in feelings of job competence, and successful achievement in work and interactions with people (Cordes and Dougherty, 1993). This feeling is likely to surface in work situations where individuals already feel exhausted or detached from other people (Maslach *et al.*, 2001). Teacher feelings of inefficacy have previously been shown to inhibit student learning (see Beard *et al.*, 2010).

"Burnout happens when exhaustion replaces feeling energized, cynicism [or depersonalization] replaces being hopeful and being involved, and ineffectiveness replaces feeling efficacious" (Chang, 2009, p. 195). Not surprisingly, burnout has been assessed as the negative antipode of work engagement - which is defined as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption (Schaufeli and Bakker, 2004). Teachers who experience burnout are less engaged at work and demonstrate lower organizational commitment, which yields them to invest less in the mission of the school and ascribe less importance to the goals of the organization (Hakanen *et al.*, 2006), such as student learning. This negative association between teacher burnout on the one hand, and teacher engagement and commitment on

the other hand, suggests that the occurrence of teacher burnout will not be conducive for the level of student learning that takes place in school. It is therefore important to learn about those factors which may antecede teacher burnout.

Antecedents of teacher burnout

In outlining antecedents of job burnout, Maslach *et al.* (2001) distinguish situational from individual factors. Antecedents of teacher burnout relate to the individual teacher - such as gender, age, teaching experience, ethnic background, marital status, educational background, expectations, or self-esteem/self-concept (see Chang, 2009; Friedman, 1991; Kokkinos, 2007; Maslach *et al.*, 2001; Mazur and Lynch, 1989), although findings regarding the role of demographic and personality characteristics are rather mixed and provide limited explanation for variation in teacher burnout (Chang, 2009). Factors that characterize teachers' work context are labeled "organizational factors" and reflect such features as work demands, participation in decision making, role ambiguity, teacher preparation, school socioeconomic composition, or organizational rigidity (Chang, 2009). Teacher burnout studies that explore such organizational factors as features which are actually measured at the organizational school level and not merely reflect an individual teacher's perception of the work context (*e.g.* Fernet *et al.*, 2012; Jackson *et al.*, 1986; Kremer-Hayon and Kurtz, 1985; Mazur and Lynch, 1989; Skaalvik and Skaalvik, 2010) are scarce though. To our knowledge, only Pas *et al.* (2012) have recently done this in using a multilevel setting in which they related teacher burnout to individual teacher features, structural features of the school organization such as student mobility and suspension rates, and schools' organizational health which was actually assessed at the organizational level using aggregation techniques and not solely as a measure at the individual teacher level. Pas *et al.* (2012) needed to conclude, however, that factors which were assessed at the level of the school organization such as organizational health or student mobility rates were generally unrelated to teacher burnout, and that more proximal individual teacher features such as teacher perceptions of student involvement and school leadership seemed to be most influential of teacher burnout.

Their findings align with Chang's (2009) statement that factors beyond those which represent merely organizational factors (answering the question "in what kind of contexts do teachers become burned out") or merely individual factors (answering the question "who becomes burned out") need to be investigated as antecedents of teacher burnout. That is why Chang discusses "transactional factors" as antecedents of teacher burnout apart from individual and organizational factors. Transactional factors reflect how teachers experience aspects of their work context (see Chang, 2009). They describe how teachers perceive different aspects of their work environment such as work load (Fernet *et al.*, 2012; Mazur and Lynch, 1989), leadership (Pas *et al.*, 2012), or autonomy (Skaalvik and Skaalvik, 2010). One of the most frequently indicated transactional factors that has been assigned as a burnout antecedent is teacher self-efficacy (*e.g.* Fernet *et al.*, 2012; Skaalvik and Skaalvik, 2007) - the extent to which one believes to be capable in organizing and executing courses of action required to successfully accomplish teaching tasks in a particular context (Tschannen-Moran and Hoy, 2001), just as is teachers' judgment of pupils' misbehavior or lacking discipline (*e.g.* Kokkinos, 2007; Skaalvik and Skaalvik, 2010).

Another transactional factor that may antecede teacher burnout is the way in which teachers perceive their social relationships with other people involved in school. Relationships between provider and recipient, but also between provider and

coworkers, establish the core of these professions. This denotes that the literature has considered the interpersonal work context as a critical factor in explaining employees' emotional strains in the job from its earliest conceptions (Maslach *et al.*, 2001). Perceived social support in the work context is probably the most intensively investigated relational characteristic that has been associated with burnout (e.g. Halbesleben, 2006; Schaufeli and Bakker, 2004). Support from others at work is conceived by these authors as a social job resource that is viewed as a way to cope with job demands and the associated psychological efforts and costs. In teaching, social support from principals, and/or colleagues has been indicated to reduce burnout (Greenglass *et al.*, 1997; Jackson *et al.*, 1986; Mazur and Lynch, 1989; Skaalvik and Skaalvik, 2010). According to Hakanen *et al.* (2006), supervisor support even buffers the negative impact of pupil misbehavior on teacher burnout. Next to social support, other relational characteristics have been related to teacher burnout as well. Feelings of affiliation with teaching colleagues have been shown to reduce burnout levels (Pas *et al.*, 2012), just as does perceiving equity in relationships with students, colleagues, and the school (Taris *et al.*, 2004).

In general, the literature demonstrates that satisfactory social relationships at work may reduce teachers' risk of demonstrating signs of burnout. A key characteristic of such relationships within organizational settings that is equally predictive of employees' job attitudes and performance is trust (Dirks and Ferrin, 2001; Leana and Van Buren, 1999). Yet, at present, insufficient light has been shed on a possible connection between teachers' trust relationships in school and their susceptibility to develop burnout.

Trust and teacher burnout

Literature that demonstrates the importance of work relationships explains teachers' job attitudes. Unsatisfactory relationships with principals, colleagues, or students may yield stress in teaching (Kyriacou, 2001; Troman, 2000), lower job satisfaction (Nias, 1981; Price, 2012; Van Houtte, 2006; Van Maele and Van Houtte, 2012), lower efficacy (Goddard *et al.*, 2000), and lower commitment to students (Lee *et al.*, 2011). Such findings regarding the importance of satisfying relationships for teachers' level of job satisfaction, stress, commitment, and efficacy, indicate that teachers are, at least in part, relationally dependent on their principal, colleagues, and students in maintaining a positive state of mind in doing their job. It seems reasonable therefore that teachers will become more prone to develop feelings of burnout when trust in these significant school parties is lacking.

The school trust literature describes trust as "a state in which individuals and groups are willing to make themselves vulnerable to others and to take risks with confidence that others will respond to the own actions in positive ways, that is, with benevolence, reliability, competence, honesty, and openness" (Forsyth *et al.*, 2011, pp. 19-20). Benevolence, reliability, competence, honesty, and openness are regarded as the five facets of trust (Hoy and Tschannen-Moran, 1999). When teachers perceive that other school members behave in line with these facets, they will be more likely to perceive them as trustworthy. Trust becomes more fragile, however, when others do not behave in line with one of these facets. When, for example, teachers have the idea that the school principal is not competent or reliable in providing and securing the necessary resources for classroom instruction, their level of trust in the principal will become fragile. Besides, trust yields confidence in other people's positive intentions (Rousseau *et al.*, 1998), and it reduces uncertainty in situations of interdependence

(Luhmann, 1979). Trust is thus a relational resource which fosters confidence in the intentions of others involved in teaching, and one which reduces uncertainty in the work context.

It is therefore reasonable to argue that an uncertain work context occurs when teachers perceive those school parties upon whom they are dependent to successfully do their work as not trustworthy (i.e. not behaving benevolent, reliable, competent, honest, open, nor demonstrating positive intentions). This is an unhealthy work situation which may encourage feelings of emotional exhaustion because teachers might develop the idea to stand alone in doing their job. A lack of trust in the principal, colleagues, or students may give rise to a sense of isolation in teaching. This may yield a more rapid use of one's energy and emotional resources (cf. Hakanen *et al.*, 2006). Emotional exhaustion may further prompt teachers to pull away from other school members and from work in general in order to make work demands more manageable. Such distancing is often an immediate reaction to exhaustion (Maslach *et al.*, 2001). Not being able to trust important others in school can also reduce teachers' sense of personal accomplishment. Trust is a crucial aspect of the actual and potential resources in relationships among organizational members (Adler and Kwon, 2002; Leana and Van Buren, 1999). Organizational resources, such as the routes to disseminate valuable information, mobilize more quickly with higher levels of trust (see Frank *et al.*, 2011; Lin, 2001). The availability of resources in the work environment, such as information or knowledge, decreases when trust is absent among organizational members. A restrained access to resources in the teaching environment because of a low level of trust in other school members may correspondingly lead to lower levels of teacher efficacy (cf. Beard *et al.*, 2010). In sum, because having trust in whom teachers are dependent on in doing their work may counteract feelings of emotional exhaustion, depersonalization, and inefficacy, we hypothesize that:

H1. Teachers who have trust in their principal, colleagues, or students will be less likely to demonstrate burnout.

Literature further suggests that antecedents of burnout demonstrate differential patterns to distinct dimensions of burnout (Cordes and Dougherty, 1993). Therefore it is advisable to investigate whether trust in specific school members associates differently with specific burnout dimensions. Linking the burnout dimensions to teacher trust with distinct trust referents is something which has insufficiently been explored previously. Research has shown that problems in managing student disruptive behavior contributes to emotional exhaustion, depersonalization, and reduced personal accomplishment (Evers *et al.*, 2004; Skaalvik and Skaalvik, 2010). Such problems are even regarded as the top contributing factor to teacher burnout (Chang, 2009). Students play a more central role within the daily process of teaching as compared to colleagues and the principal. Relationships with students might therefore be more informative of teacher burnout and its specific dimensions than relationships with the principal or colleagues are. We therefore hypothesize that:

H2. Trust in students will relate more strongly to teacher burnout and its specific dimensions as compared to trust in the principal or colleagues.

Research is further rather inconclusive regarding the role of social support from principals and colleagues regarding the specific burnout dimensions. Jackson *et al.* (1986)

found support from principals and colleagues only to relate to teachers' sense of personal accomplishment, while Greenglass *et al.* (1997) suggested that support from colleagues but not from principal affects both depersonalization and sense of personal accomplishment. Halbesleben (2006), on the other hand, advanced that social support from supervisors and coworkers is more closely related to exhaustion than to depersonalization or personal accomplishment. To shed more light on how social relationships with colleagues and the principal relate to the different components of teacher burnout, we will investigate from an explorative point of view how trust in the principal and colleagues associate with the specific dimensions of teacher burnout.

The above deals with how an individual teacher with her/his own background and experiences perceives others in the school context as trustworthy. Trust can, however, not only be considered as an individual teacher characteristic but also as a collective characteristic of a teaching staff or faculty, i.e. faculty trust (Forsyth *et al.*, 2011; Van Maele and Van Houtte, 2009). Within organizations, trust is likely to become a collective group phenomenon due to social information processes (Shamir and Lapidot, 2003). Group members affect each other's attitudes and beliefs which may become shared at a certain point. Hence, group members may develop shared interpretations of their environment, such as interpretations about another party's trustworthiness (Salancik and Pfeffer, 1978; Shamir and Lapidot, 2003). Faculty trust is a social construction which emerges out of repeated exchanges among group members and it is regarded as a collective characteristic that describes the school organization (Forsyth *et al.*, 2011), one that associates with the socioeconomic composition of the student population (Adams and Forsyth, 2013; Van Maele and Van Houtte, 2009). The occurrence of faculty trust as phenomenon across Flemish elementary schools has not yet been assessed, however. Because faculty trust has been shown to exist in American urban elementary schools (Adams and Forsyth, 2013) and in Flemish secondary schools (Van Maele and Van Houtte, 2009), we hypothesize that:

H3. Trust will equally occur as a collective feature of faculties across Flemish elementary schools.

More important, however, is that research has indicated that organizational school characteristics such as a sense of communality affect teachers' job attitudes (e.g. Lee *et al.*, 1991). We therefore hypothesize that:

H4. Faculty trust, as an organizational characteristic, might affect teacher burnout above and beyond a possible influence of teacher trust.

Providing insight into an additional effect of faculty trust above and beyond a teacher trust effect could shed light on whether trust within the faculty as a group or at the level of the individual teacher is most informative of teacher burnout.

Method

Sample

We use data gathered as part of the Segregation in Primary Education in Flanders project. These data were collected during the academic year 2008-2009 from 2,845 pupils and 706 teachers in a sample of 68 urban elementary schools in Flanders (i.e. the northern Dutch-speaking region of Belgium). Multistage sampling was conducted. First, three cities in Flanders that had relatively ethnically diverse populations were

selected to encompass the entire range of ethnic composition. Second, 116 elementary schools within these cities were asked to participate: 54 percent of them agreed to. The non-response rate was unrelated to the ethnic composition of schools, indicating that the participating schools represent the entire range of ethnic composition. In schools that agreed to participate, all the fifth-grade pupils were surveyed under guidance of the research team. If fewer than 30 fifth-grade pupils were present, all the sixth-grade students were surveyed as well. In the end, data from 2,845 pupils was gathered (mean age: 11.62). Additionally, all teachers in the participating schools were asked to fill in a questionnaire. A total of 706 teachers responded, which comes down to a response rate of 43 percent. This response rate is not very high, but this may be because of Flemish teachers being swamped by requests to participate in research. There are, however, no indications of bias in the sample due to non-response (Agirdag, 2011). In ten schools, less than five teachers responded to the questionnaires. Data of these schools were not considered for purpose of analysis, resulting in usable data of 673 teachers across 58 schools. The focus of this data gathering was on ethnic segregation and school composition. The present study, however, considers the socioeconomic school composition because Chang (2009) conceives it as an organizational factor that could affect teacher burnout. Our measure for SES-composition correlated very high with ethnic composition ($r = -0.89$). Both can therefore not be considered together in the same analysis due to multicollinearity problems (Agirdag *et al.*, 2012).

Research design

Departing from the idea that the quality of social relationships with other school members influences teachers' likelihood of burnout, the main purpose of this study is to explore whether trust in the principal, colleagues, and students - both at the teacher and school level - associate with the three specific dimensions of emotional exhaustion, depersonalization, and reduced personal accomplishments. In doing this, we will account for several teacher characteristics (gender, socioeconomic and ethnic background, teaching experience, and self-efficacy) and for the socioeconomic school composition.

To assess trust as a collective faculty characteristic, the individual teacher trust measures from which we depart need to be aggregated by, for example, calculating the mean score among the school teachers. In doing this, one has to be sure that aggregation is permitted, that is, that individual trust responses are actually shared among the teachers of a same school, or that there is cohesiveness of teacher trust perceptions within schools (see Adams and Forsyth, 2013; Van Maele and Van Houtte, 2009). We therefore calculate an Intraclass Correlation Coefficient (ICC)(2) with a one-way analysis of variance (Mean Square Between – Mean Square Within/Mean Square Between). This ICC(2) coefficient reflects within-group homogeneity and must be at a minimum of 0.60 to permit aggregation at the school level (Glick, 1985). It should be noted that our assessment of faculty trust differs from how others have done this in the past (see Forsyth *et al.*, 2011). Whereas these scholars aggregate the collective perceptions of teachers in a school regarding the faculties' trust in other school parties (e.g. The teachers in this school are suspicious of most of the principal's actions), we aggregate teacher individual perceptions of trust (e.g. I am suspicious of most of the principal's actions) after controlling whether these individual perceptions are substantially shared among the teachers from a school (Van Houtte and Van Maele, 2011; Van Maele and Van Houtte, 2009). For purpose of analyses, only those schools are

retained in which at least five teachers did respond to the questionnaire, making generalizations about a school's faculty more stable.

Given the research questions and the nested data structure, i.e. teachers within schools, hierarchical linear modeling (HLM) is advised (Lee, 2000). As is common in multilevel analysis, we first test an unconditional model to assess the ICC (1). ICC(1) estimates between-group difference and reflects the amount of explained variance at the school level (Lee, 2000). In a second step we add the individual independent teacher variables to explore whether school-level variance in the previous step is possibly due to selection effects (Lee, 2000). In this step the teacher trust variables are added while accounting for other teacher characteristics, namely, teacher efficacy, gender, teaching experience, ethnic, and socioeconomic teacher background. The school-level variables, socioeconomic school composition and faculty trust, are only added in a third model when significant school-level variance remains in step two (see Chang, 2009; Pas *et al.*, 2012). As is common, all variables except the dichotomous ones are grand mean centered to increase model stability.

Instruments[1]

Teacher burnout (overall) was measured with the Dutch version of the MBI for teachers (Schaufeli and van Horn, 1995). This scale measures teachers' emotional exhaustion (eight items such as "I feel emotionally drained from my work"), depersonalization (five items such as "I feel I treat some of my students as if they were impersonal objects") and reduced sense of personal accomplishment (seven items such as "I feel I am positively influencing other people's lives through my work"). Items were scored from (1) never to (7) always. The items referring to personal accomplishment were rescored so that a higher score reflected a higher burnout level. In following how scholars have initially measured burnout as an overall construct (Friedman, 1991; Meier, 1984), the scale score for burnout was obtained by calculating the mean score across the 20 items. Cronbach's α for the teacher burnout scale is 0.86.

To align with Maslach and Jackson's (1981) original approach of viewing burnout as being composed of three separate dimensions, we next conducted an exploratory factor analysis with varimax rotation on the 20 burnout items. Three factors with an eigenvalue higher than one were extracted. All items loaded higher than 0.4 and highest on the expected burnout dimension, except for the item "I don't really care what happens to my students". This item loaded highest on the expected depersonalization scale, but its loading was only 0.13. Given that deleting this item did not substantially improve scale reliability, we decided to retain it. Emotional exhaustion was calculated with the mean score across the eight items and has a Cronbach's α of 0.88. Depersonalization was calculated with the mean score across the five items and demonstrates a Cronbach's α of only 0.55, whereas Reduced Personal Accomplishment was obtained by calculating the mean score across the seven items and demonstrated a Cronbach's α of 0.84. Although the internal consistency for depersonalization is rather low in this study, the internal consistencies for the three burnout dimensions are in line with previous studies which showed that the reliability for the depersonalization scale is lower than for the scales assessing emotional exhaustion and personal accomplishment (Greenglass *et al.*, 1997; Schaufeli *et al.*, 2001; Taris *et al.*, 2004). Moreover, according to Schaufeli *et al.* (2001), it is not unusual that the internal consistency for depersonalization drops below 0.70. Descriptive characteristics of the burnout variables are presented in Table I.

	n	%	Mean	SD	Min.	Max.
Teacher characteristics						
Gender (male)	656	19.7				
Ethnic background (non-native)	667	6.3				
Socioeconomic background	661		5.03	1.87	1.00	8.00
Experience at school	671		11.94	9.03	0.00	39.00
Teaching efficacy	645		3.77	0.40	2.42	4.92
Trust in the principal	632		3.84	0.78	1.00	5.00
Trust in colleagues	633		4.00	0.68	1.43	5.00
Trust in students	632		3.50	0.42	1.80	4.90
Burnout	662		2.22	0.56	1.00	4.60
Emotional exhaustion	665		2.29	0.91	1.00	6.50
Depersonalization	665		1.44	0.46	1.00	4.80
Reduced personal accomplishment	665		2.71	0.73	1.00	5.29
School characteristics						
Socioeconomic composition (parents' occupational status composition)	58		4.13	1.39	1.15	6.81
Faculty trust in the principal	58		3.85	0.40	2.69	4.68
Faculty trust in colleagues	58		4.04	0.32	3.24	4.73
Faculty trust in students	58		3.51	0.26	2.73	3.97

Table I. Descriptive statistics of the teacher and school variables

Teacher trust was derived from the trust scales developed by Hoy and Tschannen-Moran (1999). The original items were translated into Dutch and reworded so that an individual teacher's trust was probed instead of a teacher's perception of the staff's trust level (e.g. "I am suspicious of my colleagues" instead of "Teachers in this school are suspicious of each other") (see Van Maele and Van Houtte, 2011). The items, after being rescored where necessary, were rated from absolutely disagree (1) to definitely agree (5), with the highest score indicating the highest trust level. An exploratory factor analysis with varimax rotation on the trust items discerned three factors with an eigenvalue higher than one. All items loaded higher than 0.4 and highest on the expected trust dimension referring to a specific trust referent, except for the item "Students at this school are secretive". This item loaded highest on the teacher trust in students scale, but its loading was only 0.31. Given that deleting this item did not substantially improve scale reliability, we retained it. As such, teacher trust in students was obtained by calculating the mean across the ten items and has a Cronbach's α of 0.80. Teacher trust in colleagues was calculated with the mean across seven items and demonstrates a Cronbach's α of 0.91, whereas teacher trust in the principal was calculated with the mean across seven items and has a Cronbach's α of 0.92. Although the scale reliabilities for our trust measures are good, they are lower than reported in previous studies (Forsyth *et al.*, 2011; Tschannen-Moran, 2014). This might be related to the fact that we measure individual perceptions instead of collective perceptions. Descriptive characteristics of the teacher trust variables are presented in Table I.

Faculty trust. To determine whether it is legitimate to assess trust in the principal, colleagues, and students as collective characteristic at the school level, the ICC derived from a one-way analysis of variance (Mean Square Between–Mean Square Within/Mean Square Between) were calculated and presented in Table II. Trust in the principal, colleagues, and students all demonstrated an ICC(2) higher than 0.66, indicating that teachers from a same school tended to share equal levels of trust in their principal, colleagues, and students, permitting the aggregation of the individual teacher

trust measures at the school level (cf. Glick, 1985). It is legitimate to speak of faculty trust within Flemish elementary schools. The sample schools varied significantly from one another in their mean scores of teacher trust (see Table II). Measures for faculty trust in the three trust referents were accordingly assessed by calculating the school mean of the respective teacher trust measures. Descriptive characteristics of these school-level measures are reported in Table I.

Teaching efficacy was measured with the short form (12 items) of the Teachers' Sense of Efficacy Scale which reflects a teacher's sense of efficacy for instructional strategies, classroom management, and student engagement (Tschannen-Moran and Hoy, 2001). Respondents were asked to indicate the extent to which they perceive themselves as capable of conducting a particular action successfully, with answering categories ranging from (1) not at all to (5) a great deal. The scale was obtained by calculating the mean across the items and demonstrates a Cronbach's α of 0.82 (see Table I), which is slightly lower than the 0.90 coefficient assessed by Tschannen-Moran and Hoy (2001).

Experience at school was operationalized as the number of years that a teacher had been working in the school. This measure correlated high with age ($r = 0.80$, $p < 0.001$) and with years of teaching experience ($r = 0.85$, $p < 0.001$), excluding the inclusion of the latter two variables due to possible multicollinearity problems (see Table I).

Socioeconomic teacher background was assessed by the occupational prestige of her/his father and mother. Teachers were asked for the (last) occupation of their father and mother. These were then classified in line with the occupational prestige classification of Erikson *et al.* (1979); the highest of both was used as an indicator of teachers' socioeconomic status (SES) background (see Table I).

Ethnic teacher background distinguishes between native and non-native teachers. As is common practice, the principal criterion was the birthplace of teachers' maternal grandmothers; Western European birthplaces were considered to qualify a respondent as of native descent (see Timmerman *et al.*, 2002). As such, a dichotomous variable was created (0 = native, 1 = non-native). As reflective of the Flemish situation, only a small proportion of the teachers had a non-native background (see Table I).

Socioeconomic school composition was based on the mean SES of the responding pupils at the school. Just as teachers, pupils were asked for the (last) occupation of their father and mother. Their answers were then classified in line with the occupational prestige classification (Erikson *et al.*, 1979); the highest score of the father or mother was used as an indicator of individual pupils' SES background. Descriptive characteristics of this school variable are presented in Table I.

Results

A substantial amount of variance in teacher trust in the principal, colleagues, and students is explained at the school level given that for all three trust measures the ICC

	ICC(1)	χ^2	ICC(2)	*F*-ratio
Trust in the principal	0.19	200.93***	0.72	3.52***
Trust in colleagues	0.15	169.74***	0.66	2.95***
Trust in students	0.27	272.59***	0.79	4.80***
Burnout	0.01	66.04	0.14	1.16

Notes: ICC(1) = $\tau_0/(\tau_0 + \sigma_0^2)$; ICC(2) = (Mean Square Between – Mean Square Within)/Mean Square Between: *$p < 0.05$; **$p < 0.01$; ***$p \leq 0.001$

Table II. Estimates of between-group difference and within-group homogeneity of teacher trust and burnout

derived from an unconditional HLM-analysis ($\tau_0/\tau_0+\sigma_0^2$), i.e. ICC(1), was substantial in size and significant (see Table II). With respect to trust in the principal, 19 percent of its variance is explained at the school level ($p < 0.001$). This is slightly lower for trust in colleagues ($\tau_0/(\tau_0+\sigma_0^2) = 0.15$; $p < 0.001$), and considerably higher for trust in students ($\tau_0/(\tau_0+\sigma_0^2) = 0.27$; $p < 0.001$). The ICC(2)-scores of the trust measures surpassed the 0.60 threshold as proposed by Glick (1985) (see Table II). This indicates that it is legitimate to view trust in the principal, in colleagues, and in students as something shared among the faculty members of a school, legitimizing the aggregation of the individual trust measures at the school level by calculating the mean per school. Flemish elementary schools can thus be distinguished from one another in terms of their level of faculty trust in the principal, in students, and in colleagues. The finding that trust occurs as a collective faculty feature supports *H3*. Interesting to note about the nature of faculty trust, is that the socioeconomic school composition had a strong significant and positive correlation with faculty trust in students ($r = 0.67$, $p < 0.001$).

Teacher burnout demonstrated an ICC(2) of only 0.14 (see Table II), which indicates that teachers from a same school do not tend to report similar levels of burnout. As compared to trust, burnout cannot be viewed as a collective characteristic of faculties. It is a specific characteristic of individual teachers. Furthermore, the unconditional multilevel model (see ICC(1) in Table II) demonstrated that only 1.5 percent of the explained variation in teacher burnout was situated at the school level, and this school-level variance was even insignificant ($\chi^2 = 66.04$; $p > 0.05$). It can thus be stated that variation in teacher burnout is not explained by variation in school contextual characteristics, an opposite finding as compared to the role of the school context in explaining variation in teacher trust scores.

Table III presents bivariate correlations among the teacher variables. Teacher trust in the principal, in colleagues, and in students are moderately but positively correlated to one another. Of specific interest to this study is that trust in the principal, in colleagues, and in students all displayed a negative and significant correlation with the overall burnout score and with each burnout dimension. The less trustworthy teachers perceived their principal, their colleagues, or their students to be, the higher the teachers' scores on emotional exhaustion, depersonalization, and sense of reduced personal accomplishment. The strongest bivariate correlation coefficients in the assessed associations between the trust and burnout measures appeared between trust in students and the overall burnout score ($r = -0.33$, $p < 0.001$), and between trust in the principal and emotional exhaustion ($r = -0.33$, $p < 0.001$) (see Table III). As expected, a negative correlation was assessed between burnout and efficacy ($r = -0.38$, $p < 0.001$) (see Table III). Years of experience at school also demonstrated a small but positive correlation with burnout and the burnout dimensions. The more years teachers were at a school, the higher the burnout scores.

We have already discussed that the unconditional multilevel analysis indicated that no significant variance in burnout occurred between schools. A similar finding was assessed with respect to depersonalization ($\tau_0/(\tau_0+\sigma_0^2) = 0.00$; $p > 0.05$), and reduced personal accomplishment ($\tau_0/(\tau_0+\sigma_0^2) = 0.02$; $p > 0.05$). Only for emotional exhaustion, a small but significant proportion of the variance was explained at the school level ($\tau_0/(\tau_0+\sigma_0^2) = 0.05$; $p = 0.001$). The ICC(1)-scores for burnout and its three dimensions suggest that characteristics assessed at the school level, such as faculty trust or SES composition, play a negligible role in explaining variation in burnout and its specific components (cf. Lee, 2000).

In Table IV, individual teacher characteristics were added to the unconditional models. With respect to teacher burnout, there appeared a strong negative association

	α	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Socioeconomic background		−0.07								
(2) Experience at school		−0.03	0.01							
(3) Teaching efficacy	0.82	−0.04	−0.12**	0.13***						
(4) Trust in the principal	0.92	−0.01	−0.07	0.08*	0.47***					
(5) Trust in colleagues	0.91	−0.06	0.07	0.25***	0.25***	0.22***				
(6) Trust in students	0.80	0.05	0.19***	−0.38***	−0.32***	−0.29***	−0.33***			
(7) Burnout	0.86	0.05	0.19***	−0.13***	−0.33***	−0.26***	−0.25***	0.86***		
(8) Emotional exhaustion	0.88	0.02	0.09*	−0.20***	−0.17***	−0.27***	−0.13***	0.59***	0.41***	
(9) Depersonalization	0.55	0.04	0.12**	−0.57***	−0.17***	−0.12**	−0.29***	0.72***	0.31***	0.33***
(10) Reduced personal accomplishment	0.84									

Note: *$p < 0.05$; **$p < 0.01$; ***$p \leqslant 0.001$

Table III.
Bivariate correlations among the teacher variables and scale reliabilities

	Burnout	Emotional exhaustion	Depersonalization	Reduced personal accomplishment
Intercept	2.146***	2.366***	1.312***	2.536***
Teacher characteristics				
Gender (0 = female)	0.035	−0.039	0.090*	0.077
Ethnic background (0 = native)	0.048	0.049	−0.034	0.022
SES background (Parents' occupational status position)	0.042	0.033	0.015	0.035
Experience at school	0.181***	0.193***	0.038	0.128***
Teaching efficacy	−0.332***	−0.088*	−0.173***	−0.539***
Trust in the principal	−0.126*	−0.192***	−0.050	−0.042
Trust in colleagues	−0.156**	−0.157*	−0.180***	−0.017
Trust in students	−0.191***	−0.130*	−0.027	−0.163***
Deviance	743.744	1,377.721	668.860	1,048.934
	$\chi^2_{\text{DIFF.}}(11) = 11.17$, $p > 0.05$	$\chi^2_{\text{DIFF.}}(11) = 7.04$, $p > 0.05$	$\chi^2_{\text{DIFF.}}(11) = 6.57$, $p > 0.05$	$\chi^2_{\text{DIFF.}}(11) = 21.97$, $p = 0.024$
Explained teacher-level variance $(\sigma_0^2 - \sigma_1^2)/(\tau_0 + \sigma_0^2)$	50.9%	46.1%	32.9%	49.2%

Notes: Presented are the standardized gamma coefficients (γ*) and model characteristics: *$p < 0.05$; **$p < 0.01$; ***$p \leq 0.001$

Table IV. Association between teacher characteristics, teacher burnout and burnout dimensions

with teaching efficacy ($\gamma^* = -0.33$; $p \leq 0.001$) and a modest positive association with experience at school ($\gamma^* = 0.18$; $p \leq 0.001$). The teacher trust measures demonstrated an independent and negative association with burnout, supporting *H1*. As predicted in *H2*, the strongest association with burnout appeared for trust in students ($\gamma^* = -0.19$; $p \leq 0.001$), followed by trust in colleagues ($\gamma^* = -0.17$; $p < 0.01$), and trust in the principal ($\gamma^* = -0.13$; $p < 0.05$).

Assessing the above antecedents in relation to the specific burnout dimensions provided some interesting and additional insights into sources of the burnout components (see Table IV). Although gender was unrelated to the total burnout score, we found that male teachers reported slightly higher levels of depersonalization ($\gamma^* = 0.09$; $p < 0.05$). Experience at school, on the other hand, was not significantly related to this burnout dimension whereas it influenced emotional exhaustion ($\gamma^* = 0.19$; $p \leq 0.001$) and reduced personal accomplishment ($\gamma^* = 0.13$; $p \leq 0.001$). Teaching efficacy held distinct associations with the three burnout dimensions, with, as expected, a strong association with reduced personal accomplishment ($\gamma^* = -0.54$; $p \leq 0.001$).

Of particular interest with respect to the main purpose of our study is the finding that trust in the principal, colleagues, and students demonstrated different relationships with each of the burnout dimensions. In contrast to *H2*, trust in students did not relate more strongly to the burnout dimensions than did the measures for trust in the principal and colleagues. Emotional exhaustion was related more strongly to trust in the principal ($\gamma^* = -0.19$; $p \leq 0.001$) than to trust in colleagues ($\gamma^* = -0.16$; $p < 0.05$) or students ($\gamma^* = -0.13$; $p < 0.05$). Depersonalization only related significantly to trust in colleagues ($\gamma^* = -0.18$; $p \leq 0.001$), whereas trust in students was the only trust measure that significantly associated with reduced personal accomplishment ($\gamma^* = -0.16$; $p \leq 0.001$).

No significant school-level variance was present in the models of total burnout, emotional exhaustion, and depersonalization after including the teacher variables into our models. It is accordingly unadvisable to add school-level variables such as the faculty trust measures to the multilevel models in a next step. A small amount of school-level variance did appear though in the model that explored reduced personal accomplishment after including the teacher variables ($\tau = 0.18$; $p < 0.05$). Yet, adding the faculty trust variables in a next step did not improve model fit for reduced personal accomplishment (not presented), indicating that faculty trust did not additionally contribute to the explanation of variation in personal accomplishment. In sum, and in contrast to *H4*, we did not find an additional effect of faculty trust on teacher burnout nor on its specific dimensions when taking into account individual teacher characteristics.

The explained teacher-level variance of the models for burnout and its three dimensions indicate that trust and the included teacher characteristics predict a substantial proportion of variation in teacher burnout, emotional exhaustion, depersonalization, and sense of reduced personal accomplishment (see Table IV).

Discussion

As in other countries, the level of teacher turnover within the Flemish educational system calls for attention from policymakers and school leaders (Flemish Ministry of Education and Training, 2013). In order to grasp processes which strengthen teacher retention it is necessary to the understanding of those factors which foster development of attrition inducing job attitudes such as burnout (Jackson *et al.*, 1986). As an antipode of work engagement (Schaufeli and Bakker, 2004), it is further reasonable to argue that teachers who experience burnout will not act in a way that is conducive for student learning given that work engagement equals additional professional efforts and prosocial behaviors toward clients (Freeney and Fellenz, 2013). For school leaders and policymakers it is accordingly crucial to understand which factors contribute or inhibit the development of teacher burnout.

Given that a key feature of the quality of social relationships in school is trust (Bryk and Schneider, 2002), we investigated whether a lack of perceived trust in significant other school parties contributes to the occurrence of burnout among elementary school teachers. Our study thus investigated whether a high quality of relationships in school may counteract signs of teacher burnout. This choice has been informed by the fact that involvement in the social system of the school is a crucial aspect of teaching (Bryk and Schneider, 2002; Nias, 2005). In light of this, it has been shown, for example, that teachers who perceive their relationships with principals, colleagues, or students to be unsatisfactory demonstrate a less positive state of mind in doing their job (e.g. Nias, 1981; Price, 2012; Troman, 2000).

The general aim of this study was to deepen the understanding of a trust-burnout association within the teaching profession. Although recently there has been light shed on an influence on teacher burnout stemming from trust (Dworkin and Tobe, 2014; Timms *et al.*, 2007), the nature of associations between trust in specific (groups of) school members and distinct components of burnout needed further investigation. For this reason we explored whether teacher trust in the principal, in colleagues, and in students hold independent relationships with teacher burnout and its three specific dimensions, namely, emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment (see Maslach *et al.*, 2001). We additionally investigated whether trust not only acts as a teacher feature that inhibits burnout, but equally

whether it can be regarded as a school feature, i.e. faculty trust, that protects teachers from burnout. The question we raised is whether faculty trust holds an independent association with teacher burnout upon a possible influence of teacher trust. Providing insight into this matter sheds light on whether principals should focus on developing a school atmosphere that is conducive for trust to develop within the faculty as a group or whether attention should rather be paid to strengthen trust relationships of individual teachers with other school members in order to counteract signs of burnout among teachers. In taking into account how both teacher and faculty trust in the principal, in students, and in colleagues associate with burnout and its specific components, our study adds in an original way to the knowledge of the nature of a trust-burnout association within the teaching job.

The findings show that trust counteracts perceptions of burnout among elementary school teachers. Teachers who perceived their principal, colleagues, or students as trustworthy reported lower levels of burnout. A lack of trust in each of these trust referents showed an independent contribution to the level of teacher burnout. Trust in students had the strongest effect on burnout as compared to the effect of trust in principal and colleagues. This aligns with the statement that student disruptive behavior, which is likely to lead to lower levels of trust in students, is the top factor that contributes to burnout (Chang, 2009, p. 202). The role of perceiving the principal and colleagues as trustworthy in suppressing teacher burnout should not be underestimated, however (see also Dworkin and Tobe, 2014). These results suggest that satisfactory relationships with the principal, with colleagues, and with students play a role in fostering teachers' job attitudes. It should further be noted that not only trust anteceded teacher burnout since teachers with more years of experience at school and teachers with low levels of self-efficacy were more prone to higher burnout levels as well (cf. Friedman, 1991; Fernet *et al.*, 2012).

The picture becomes more enlightening though when relationships between trust in specific school parties and the distinct components of burnout are scrutinized. The analyses indicated that trust in a specific school party is particularly informative for a specific burnout dimension. Trust in the principal contributed to lower levels of teachers' emotional exhaustion, more than did trust in colleagues and students. This is an important finding because emotional exhaustion is considered as the core element of burnout and its most obvious manifestation (Chang, 2009). Principals thus fulfill a crucial role in preventing feelings of emotional exhaustion to arise among teachers. This finding aligns with Halbesleben's (2006) statement that social support at work is particularly associated with emotional exhaustion. We can therefore conclude that those school leaders who are not discerned by their teachers as demonstrating benevolence, reliability, competence, openness, and honesty in their actions and attitudes risk a higher level of emotional exhaustion, and burnout, to occur within their teaching staffs.

While teacher-principal relationships were most predictive of emotional exhaustion, collegial trust relationships appeared to matter most for teachers' feelings of depersonalization. Colleagues seem to fulfill a crucial role in preventing teachers from becoming indifferent to their work and from taking distance from the people they work with, mainly pupils. This finding concurs with Greenglass *et al.* (1997) who found that support from co-workers decreases depersonalization and increases feelings of personal accomplishment. In our analyses, however, neither trust in colleagues, nor trust in the principal did predict feelings of personal accomplishment, whereas the level of trust in students did. Teacher-student relationships are therefore likely to be more

predictive of this burnout dimension than are teacher-teacher or teacher-principal relationships. Although teachers' work requires interdependence with colleagues and the principal (Nias, 2005; Troman, 2000), our findings indicate that trust relationships with these school parties are not supportive of a sense of personal accomplishment. This might need to be regarded in light of the fact that (instrumental) autonomy remains a typical aspect of the teaching job (Lortie, 1975/2002), yielding teachers to deduce their own feelings of accomplishment mainly in light of their interactions with, and the learning of, their students in class.

It is also important to note that Flemish elementary schools differ from one another in their level of faculty trust, just as is the case for (elementary) schools in the USA (Forsyth *et al.*, 2011) and for Flemish secondary schools (Van Maele and Van Houtte, 2009). Teachers from the same school tended to share equal levels of trust in their principal, colleagues, and students. Trust is thus a collective characteristic of faculties that distinguishes elementary schools from one another. This contrasts sharply with the finding that levels of teacher burnout did not appear to be shared in the school environment. This suggests that burnout is mainly an individual teacher matter, something which has already been argued regarding teachers' morale and job satisfaction (Evans, 1997). Evans contends that comparative experiences such as previous jobs, comparative insights such as knowledge of interpersonal relationships in other schools, and the consideration of their non-teaching lives result in different evaluative yardsticks against which teachers rate their current job as satisfactory or not. A process which, in light of these findings, equally seems to hold with respect to teacher burnout. Teacher burnout was also not affected by school-level characteristics. The analyses demonstrated that no effect on burnout was present at the level of the school organization. Neither faculty trust nor the socioeconomic composition of the student population could be assessed as predictors of burnout. This finding aligns with a recent study in the USA which concluded that school-level factors were generally unrelated to teacher burnout (Pas *et al.*, 2012). Yet, as mentioned above, our assessment of faculty trust aggregates individual perceptions whereas others have measured this by aggregating collective perceptions (Forsyth *et al.*, 2011). Because it has been demonstrated that school-level variables derived from aggregated collective teacher perceptions vs aggregated individual teacher perceptions might associate differently to school features such as socioeconomic school composition (Van Houtte and Van Maele, 2011), an interesting question for future research might be whether both ways of measuring faculty trust hold similar or different relationships to teacher burnout.

Implications

Our study demonstrates that trust may act as a relational buffer to teacher burnout. Future research on the burnout phenomenon in teaching should therefore account for the quality of the relationships that teachers have with other school members. Furthermore, our findings indicate that distinct dimensions of both teacher trust and burnout need to considered in investigating the trust-burnout association. This is because teacher trust in the principal, in colleagues, and in students all play a different role with respect to the different dimensions of burnout (i.e. emotional exhaustion, depersonalization, and sense of reduced personal accomplishment).

Although trust in students was most predictive of burnout as compared to trust in colleagues or the principal, teacher-principal relationships can fulfill an important role in preventing teachers to become burned out. After all, emotional exhaustion,

which is considered as the core element of burnout and conducive for feelings of depersonalization or reduced personal accomplishment to develop (see Chang, 2009; Maslach *et al.*, 2001), is more strongly influenced by the level of trust in the principal than by trust in students or colleagues. In order to prevent teachers from becoming emotionally exhausted, principals should act in such a way that their teachers perceive them as trustworthy - i.e. demonstrating benevolence, reliability, competence, openness, and honesty (Hoy and Tschannen-Moran, 1999). Accordingly, it can be argued, for example, that emotional exhaustion within the teaching staff is less likely to occur in those schools in which the principal appears to care about teachers' well-being (benevolence), comes true with the resources teachers need (reliability), demonstrates the skills to lead and manage the staff (competence), acts authentically in line with previous promises (honesty), and does not withhold relevant information (openness). It is important to note though that our findings are based on cross-sectional data and therefore exclude causal interpretation. It is equally conceivable that teachers who already feel emotionally exhausted are just not able to develop trust in others at work such as the principal. Trust and burnout are likely to be circular phenomena, however (Dworkin and Tobe, 2014). The impossibility of causally interpreting the trust-burnout associations in the present study should therefore not be used as a reason for principals to reduce the role they might play in protecting teachers from becoming emotionally exhausted. Another reason why principal-teacher relationships matter for teacher burnout is the fact that principals set the tone for a school atmosphere which is conducive for all kind of trust relationships in school to develop (Bryk and Schneider, 2002; Forsyth *et al.*, 2011; Tschannen-Moran, 2004). They are thus indirectly involved in the strength of teacher-teacher and teacher-student trust relationships, which are shown to affect teachers' feelings of depersonalization and personal accomplishment, respectively.

To conclude, this study indicates that an educational policy with a focus on trust building in order to inhibit teacher burnout is worth the effort. Such a policy might contribute, in the long run, to teacher retention, and should equally be conducive for student learning. Yet, patience is advised because trust is a relational characteristic which takes time to develop while it is easily broken down (Tschannen-Moran, 2004). Research should further proceed to explore which practices are conducive for trust to develop at the level of both the teacher and the faculty. Teacher and faculty trust are, however, likely to be interrelated since individuals working in a group characterized by collective trust are likely to develop trust themselves due to social information processes, a kind of spillover effect stemming from the group level (cf. Jackson and Bruegmann, 2009; Penuel *et al.*, 2012), while social information processes similarly explain why groups are likely to become characterized by collective trust when their constitutive members individually trust one another (Forsyth *et al.*, 2011; Salancik and Pfeffer, 1978; Shamir and Lapidot, 2003). The main focus for principals and educational policy makers should therefore be on subscribing to the importance of trust for schooling in general, and for inhibiting teacher burnout in particular. From the nature of trust, it can be stated that ensuring that school members share role expectations and obligations for one another and expose behaviors and attitudes that demonstrate benevolence, reliability, competence, honesty, and openness is a promising road to strengthen the trust relationships in school. Future qualitative research, preferably in combination with longitudinal survey data, is required though to shed more light on which trust building processes could diminish the level of teacher burnout in time.

Note

1. Please contact the corresponding author for the Dutch scale items.

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