

Underperforming teachers: the impact on co-workers and their responses

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Abstract

Research indicates that underperforming teachers have a profound impact on students and on principals who struggle to deal with the underperformance. However, the impact on, and responses of, other teachers (i.e. co-workers) is rarely studied, in spite of the importance of teacher collaboration in contemporary education. Therefore, we interviewed co-workers about incidents of teacher underperformance, using the Critical Incident Technique. Our respondents reported various types of underperformance, including student-related and teamrelated underperformance, as well as task underperformance and counterproductive work behaviours. Dependent on the specific incident, co-workers were more directly or indirectly affected by the underperformance. They expressed frustrations, concerns, and feelings of injustice, not only about the underperformance itself, but also about a lack of response by the school principal. Moreover, we found that co-worker responses depended on how they perceived the necessity, appropriateness, and utility of responding, as well as their responsibility to respond. This was influenced by characteristics of the underperformance, underperformer and co-worker, and leadership and team factors. Implications for educational research, policy, and practice are discussed.

Keywords Underperforming teachers · Co-workers · Performance management · School leadership · Critical Incident Technique

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1 Introduction

International research indicates that 3 to 15% of teachers perform below the norm or standard (Lavely 1992; Menuey 2007; OFSTED/TTA 1996; Pugh 2014; Yariv 2004). These underperforming teachers¹ have a profound impact on students' learning outcomes (Marzano 2012; Range et al. 2012). The cumulative effects of ineffective teachers on the exam results of students are traceable for at least 4 years (Haycock 1998; Rivers and Sanders 2002). Underperforming teachers also affect students' well-being and motivation (Kaye 2004; Menuey 2007). They often cause great concern among principals (Causey 2010; Page 2016), who find it hard to address the underperformance, while experiencing numerous difficulties and barriers (e.g. juridical constraints for dismissal, the emotional strain of confronting underperformers, a perceived lack of time, and support) (Le Fevre and Robinson 2014; Van Den Ouweland et al. 2016).

In-depth research on the impact of underperformance on and responses of other teachers in the school is scarce. However, teacher collaboration, teachers' professional community (i.e. peer feedback, deprivatized practice, shared responsibility, and shared norms), and collaborative professional learning are considered to be vital for teacher development, educational quality, school effectiveness, and school improvement in contemporary education (Goddard et al. 2007; Tam 2015; Vangrieken et al. 2015). Because of this heightened importance of teamwork, it is reasonable to believe that teachers will also be confronted with underperforming team members. Therefore, we argue that, in order to have a more complete view of how teacher underperformance affects and is dealt with in schools, co-workers should be included in studies on teacher underperformance.

Therefore, we set out the following research questions:

- How are co-workers affected by teacher underperformance?
- How do co-workers respond to underperforming teachers and why do they respond in a certain way?

We set out to study these research questions in secondary education in Flanders. In what follows, we start by conceptualising 'work underperformance'. Since studies on co-workers in education are scarce, we will provide an overview of the existing organisational literature on the co-workers of underperformers in other disciplines and work sectors. This literature overview will form a conceptual basis for our study design and the analysis of our findings.

¹ Researchers use different terms to indicate that a teacher is not performing according to an acceptable standard/norm: incompetent teacher (e.g. Cheng 2014), marginal teacher (e.g. Kaye 2004), ineffective teacher (e.g. Nixon et al. 2013), challenging teacher (e.g. Yariv 2004), poor performing, and underperforming teacher (e.g. Rhodes and Beneicke 2003). We adopt the term 'underperformance', since it indicates that one performs below the norm or expectations, without a priori adjudicating on the severity, cause, or type of underperformance.

2 Theoretical framework

2.1 Work performance and underperformance

Work performance is a multidimensional concept. It consists of task performance, organisational citizenship behaviours (OCB), and counterproductive work behaviours (CWB) (Campbell and Wiernik 2015; Koopmans et al. 2011). Task performance is 'in-role' behaviour, and OCB is contextual, 'extra-role' performance (Motowildo et al. 1997; Sonnentag and Frese 2002). While task performance refers to the job core or the formal job description of the employee, contextual performance includes behaviour, such as helping and taking on additional tasks (Christ et al. 2003). Task performance includes both performance outcomes (the achievement of goals) and the process of effectively using one's competencies to achieve these outcomes (Roe 1996). CWB's-or 'deviance', a term that is mostly used interchangeably with CWB's-are 'volitional acts by employees that potentially violate the legitimate interests of, or do harm to, an organization or its stakeholders' (Marcus et al. 2016, p.204), such as intentionally breaking the rules and interpersonal aggression (Robinson and Bennett 1995). These three dimensions of work performance are related (e.g. there is a negative correlation between OCB and CWB), but distinct (e.g. one may perform well in both task and contextual performance but exhibit CWB's and the dimensions have partly different antecedents and determinants), contributing uniquely to the overall work performance (Dalal 2005; Sackett et al. 2006). When discussing underperformance in this article, we refer to all three dimensions: task underperformance, lack of organisational citizenship behaviour, and/or counterproductive work behaviour.

In education, teachers' task performance is multifaceted: while student learning is teachers' primary responsibility, teachers have a comprehensive job, with multiple roles and both teaching and non-teaching responsibilities (Cheng and Tsui 1999; Yariv 2004). They hold responsibilities to their schools, principals, co-workers, students, the wider community, and to their profession (Page 2016). What is considered to be teachers' task performance is translated into professional standards and job descriptions and involves both the processes and the outcomes of teacher performance (Cheng and Tsui 1999). Examples of teachers' organisational citizenship behaviours include helping out co-workers, suggesting improvements, and voluntarily taking on additional school tasks (Oplatka 2009). Runhaar et al. (2013) suggest that 'because formal job and task descriptions can never cover the entire array of behaviors that are needed to successfully respond to continuously changing demands, schools depend on this OCB' (p.99). Teacher CWB's include misbehaviours such as verbal aggression towards co-workers or pupils, having inappropriate relationships with pupils, and intentionally violating testing protocols (Page 2016; Richardson et al. 2008).

We will study teacher performance and co-worker responses at the individual level, i.e. how a teacher experiences and responds to an underperforming teacher in his/her school. This does not mean that teacher performance is considered to be a solely individual phenomenon. Instead, it is dependent on the team, school, and the wider educational system in which the teacher works (Darling-Hammond and Rothman 2011; Hanushek et al. 2005).

2.2 The impact on, and responses, of co-workers

While research on co-workers of underperformance teachers is scarce, research on coworkers has been conducted in a variety of other disciplines and work sectors, such as healthcare (e.g. Henriksen and Dayton 2006), engineering (e.g. Morrison et al. 2011), technology (e.g. Vakola and Bouradas 2005), government agencies (e.g. Bradfield and Aquino 1999), finances (e.g. Struthers et al. 2001), and a wide variety of positions, such as physicians (e.g. Schwappach and Gehring 2014), managers (e.g. Gruys et al. 2010), and technical staff (e.g. Gruys et al. 2010). Some studies were performed in multiple sectors (e.g. Bowling and Lyons 2015; Neff 2009).

This research is grouped together into three research strands. An overview is provided in Table 1. First are the Attribution Theory studies, which are rooted in social psychology and focus on the causes that co-workers attribute to a colleague's underperformance (which is mostly task underperformance, but also CWB's) and how this impacts on their responses. Second is a research on peer reporting of CWBs and deviance, which studies co-workers' motives for, and influences on, whether or not to report this misbehaviour to one's supervisor. Third, voice and silence research focuses on why, and when workers approach their supervisors and/or co-workers or remain silent about workplace issues and perceived injustices—including performance problems.

This research suggests that underperforming workers affect their co-workers' emotions, cognitions, attitudes, and behaviour (Neff 2009; Robinson et al. 2014). Coworkers can be the direct target of the behaviour; observe the behaviour, or learning

	Types of underperformance studied	Types of co-workers' responses studied	Types of influencing factors on co-workers' responses
Attribution theory studies	Mostly task underperformance, but also other perceived injustices, CWB's, or unspecified.	Responses towards the underperformer (e.g. helping, motivating, rejecting, compensating).	Causal attributions affecting co-worker emotions (e.g. an- ger or compassion), cogni- tions (e.g. perceived changeability), and behav- iours (e.g. helping or punishing) towards underperformers.
Studies on peer reporting of CWB	Counterproductive work behaviours, deviance (e.g. unethical behaviour)	Peer reporting to supervisor	Diverse influences including the severity of CWB's, co-worker characteristics, team factors; leadership factors and related motives.
Voice & silence studies	Workplace issues such as concerns, suggestions, opinions, and perceived injustices, including co-worker underperformance	Speaking up or remaining silent, mostly to supervisors, but also to co-workers	Diverse influences including co-worker characteristics, team factors, organisational and leadership factors, and relational characteristics, leading up to a cost-benefit analysis of appropriate re- sponses.

Table 1 Literature review: three research strands on co-workers' responses to underperformers

about the behaviour from others (Robinson et al. 2014). Explanations of the impact of a workers' underperformance on co-workers are mostly based on organisational justice theory (Greenberg 1990) and equity theory (Adams 1963); co-workers perceive the underperformance to be unjust and unfair towards themselves and other wellperforming, hardworking co-workers. Underperformance breaks norms of collegial reciprocity and social responsibility (Neff 2009; Simon, Taggar and Neubert 2004). In addition, underperforming workers may damage a co-worker's trust, leading to feelings of anger, anxiety, stress, and retaliation. They can also affect the co-workers' work attitudes and performance, as well as group dynamics, for example by acting as negative role models (Felps et al. 2006; Hung et al. 2009; Robinson et al. 2014; Taggar and Neubert 2004). Attribution Theory (Weiner 1985) proposes that co-workers' emotions can be more or less favourable, i.e. by being angry versus feeling empathy towards the underperformer, which are dependent on the perceived causes of the underperformance (e.g. lack of ability versus demotivation) and the perceived possibility of change (Lepine and van Dyne 2001; Weiner 2010). Moreover, Edwards et al. (2009) indicated that co-workers also experience concerns about their past and future responses to the underperformance.

Concerning the impact of teacher underperformance on co-workers, a study by Page (2016) on serious teacher misbehaviour found that it eroded the will and energy of other teachers, and caused both frustration and despair. Co-workers felt let down by the underperformer, and considered the misbehaviour to be a betrayal towards both students and schools. Research by Kaye (2004) on 'marginal teaching' found that the impact on co-workers depended on the nature of the performance problem and the underperformer's willingness to accept help and to acknowledge these problems.

Co-workers may respond to underperforming workers in different ways. Attribution studies make a distinction between compensating for the underperformance (e.g. taking on some of the underperformer's tasks), training (e.g. advising the underperformer), motivating (e.g. pointing out consequences of poor performance), and rejecting the underperformer (e.g. avoiding further interactions) (Ferguson et al. 2010; Jackson and LePine 2003; Lepine and van Dyne 2001). Other authors have distinguished between helping and punishing, prosocial (e.g. advising), and antisocial reactions (e.g. silent treatment) (Struthers et al. 2001; Taggar and Neubert 2004, 2008). While Attribution Theory studies focus on the responses which are directed towards the underperformer, studies on peer reporting of CWB and voice & silence studies include responses directed towards third parties, i.e. speaking up or remaining silent to one's supervisor and/or other co-workers (Morrison 2014; Vakola and Bouradas 2005). Voice & silence studies have argued that co-workers make a cost-benefit analysis before choosing a response (Bisel and Arterburn 2012; Morrison 2011): they may fear the negative consequences of raising the issue (e.g. retaliation), keep silent out of prosocial considerations (e.g. not wanting to harm the underperformer), or find it futile to respond (e.g. they believe that speaking up will not make a difference) (Knoll and van Dick 2013; Van Van Dyne et al. 2003).

These studies discern different types of influences on co-workers' responses: i.e. characteristics of the underperformance and the underperformer, individual characteristics, leadership factors, organisational factors, and team factors. Concerning characteristics of the underperformance and the underperformer, attribution studies focus on the performance history and perceived causes (e.g.

ability, effort, task difficulty, bad luck) of the underperformance and whether co-workers consider these causes to be internal or external to the underperformer, controllable or uncontrollable, and stable or unstable. This will determine how co-workers perceive the possibility of change and the expected consequences of actions, i.e. whether a co-worker feels able to impact the underperformance (Lepine and van Dyne 2001; Weiner 2010). While the perceived causes of the underperformance are considered to be the main explanation for co-workers' responses, additional influences were found, among others, of emotions expressed by the underperformer (anger or sadness) and the likableness of the underperformer (Bradfield and Aquino 1999; Ferguson et al. 2010). Peer report studies and voice and silence studies indicate that reporting the underperformance to one's supervisor depends upon the seriousness and impact of the misbehaviour (Bowling and Lyons 2015; Neff 2009), and speaking up to a co-worker appears to be easier when one knows this coworker well (Schwappach and Gehring 2014). However, voice & silence research has found that co-workers' underperformance is one of the issues that is hardest to voice (Brinsfield 2009; Henriksen and Dayton 2006; Milliken et al. 2003). Individual factors also play a role in co-worker responses: peer report and voice partly depend on the co-worker's age and work experience (e.g. older, more experienced co-workers tend to voice more), his/her position in the team, personality, self-esteem, organisational attitudes, performance, and interpersonal skills (Bowling and Lyons 2015; Gruys et al. 2010; Morrison 2011). The tendency to speak up or report the underperformance was found to depend upon team characteristics as well, i.e. the team's cohesion and trust and the group's consensus on the performance problem (Bowen and Blackmon 2003; King and Hermodson 2000). Moreover, attribution studies found that coworkers influence each other's responses by sharing emotions, judgments, and beliefs and constructing shared attributions (Harvey et al. 2014; Taggar and Neubert 2004). Voice and silence studies indicate that the decision to speak up or remain silent, also depends on organisational factors, including communication opportunities, work climate (e.g. justice vs. distrust), and voice climate (e.g. collective norms of voice or silence) (Edwards et al. 2009; Morrison et al. 2011; Tangirala and Ramanujam 2008). Finally, leadership factors, i.e. leadership style, support, and receptivity, were found to influence whether workers spoke up to their supervisors (Milliken et al. 2003; Morrison 2014; Mowbray et al. 2015).

In education, little is known of co-workers' responses. A study by Richardson et al. (2008) on teachers violating the testing protocol found that the reporting of co-workers to the principal was influenced by co-workers' communication competence and policy attitude, supervisor receptivity, and participatory school culture. To our knowledge, more research on how and why co-workers respond to underperforming teachers is lacking.

In summary, our literature overview indicates that underperforming workers can have a profound impact on co-workers. Co-workers may respond in very different ways, such as rejecting the underperformer, motivating him/her, compensating for the underperformance, helping or advising the underperformer, keeping silent about the underperformance to the underperformer and/or others, and speaking up about the underperformance to supervisors and other co-workers (i.e. reporting). These responses depend on a range of factors, including characteristics of the co-worker, the underperformance and the underperformer, organisational characteristics, team factors, and leadership factors. As we learn more about the importance of collaboration for effective teaching, it is important to study how these insights apply to education, i.e. to understand how teachers are impacted by this underperformance, and how and why they decide to respond to this underperformance.

3 Methodology

3.1 Research context and sample

Our study was executed in Flanders, the Dutch speaking part of Belgium. Deregulation and decentralisation are important features of Flemish educational policy, and selfregulation of schools is expected. The government provides a curriculum with attainment targets for students, which define what students are expected to know and be able to do at different stages during compulsory education (Vanhoof et al. 2013). There are no mandated central exams or national student tests, and schools can choose their instructional methods (Vekeman et al. 2017). Moreover, schools have the autonomy to create job descriptions and evaluation criteria for teachers (OECD 2014; Penninckx et al. 2011). School boards largely decentralise HRM responsibilities to individual schools, and principals play a central role in HR and performance management, since other management levels are absent in Flemish education (Vekeman et al. 2016).

Our study was performed in the secondary education sector, which teaches students between 12 and 18 years old. It is part of compulsory education, situated in between primary education and higher education. Although official numbers are lacking, a recent study in secondary education found that principals considered 12% of their teachers to underperform in one or more job domains, especially student-tailored teaching and student evaluation, implementing innovations, dealing with problematic student behaviour and motivating students, and/or having a too narrow view of their duties (Plas and Vanhoof 2016). In addition, international comparative research indicates that Flemish secondary education scores low on professional community characteristics, such as peer feedback, deprivatized practices, and joint teaching (Lomos 2017; OECD 2014).

To obtain a diverse sample of teachers, the call for respondents was sent to all 210 secondary schools in the Flemish province of Antwerp. Twenty teachers volunteered to participate. Since the first interview was a try-out interview (to explore the clarity and comprehensiveness of the questions and the required time frame for discussing an incident) and resulted in adaptations of research questions, we will report the findings of interviews with 19 teachers, with whom we discussed 53 incidents. The sample was a heterogeneous sample, consisting of ten women and nine men, aged 26 to 59 (mean age 39). Two respondents taught in general education, two in vocational schools, two in technical schools, and two in art schools. The remaining teachers worked in schools with two or more educational levels. Their subjects included humanities, ancient and modern languages, arts, economics, technical and vocational subjects, religion, and history. Participation was anonymous and voluntary, and participants signed an

informed consent stating the purpose and method of the study, as well as participant rights. The Ethics Committee of the University of Antwerp also approved the study.

3.2 Method

We opted for interviews to obtain a nuanced understanding of the impact of teacher underperformance on co-workers, as well as co-worker responses (Cohen et al. 2011). The existing studies on co-workers (in other work sectors, as well as the few studies in education) are mostly experiments or survey studies with vignettes, using hypothetical cases (e.g. Ferguson et al. 2010; Liden et al. 2001; Richardson et al. 2008). Therefore, they studied co-workers' intentions or attitudes, rather than their actual responses (Bowling and Lyons 2015; Struthers et al. 2001). Our aim was to study real incidents in which our respondents had been confronted with an underperforming teacher; therefore, we chose the Critical Interview Technique. This is 'a qualitative interview procedure, which facilitates the investigation of significant occurrences (events, incidents, process or issues), identified by the respondent, the way they are managed, and the outcomes in terms of perceived effects. The objective is to gain an understanding of the incident from the perspective of the individual, taking into account cognitive, affective and behavioural elements' (Chell 2004, p.48). It is based on the Critical Incident Technique (CIT), developed by Flanagan (1954). It can yield in-depth, contextualised accounts of real-life incidents (Hughes et al. 2007), and allows respondents to discuss cases of their own choosing, which are important to them (Gremler 2004).

We asked our respondents to describe incidents in which they perceived a co-worker was underperforming, i.e. performing below the norm or expectation, in one or more aspects of the job. In line with recommendations in CIT-research, we asked them to discuss recent incidents (i.e. during the current school year), since retrospection and memory can distort or lead to reinterpretations of events (FitzGerald et al. 2008; Gremler 2004). Incidents were discussed in-depth. For each incident, we asked about the respondents' perceptions of the underperformance (i.e. the nature, severity, duration, detection, causes) and of the underperformer (e.g. age, relationship with the underperformer). Next, we discussed the impact it had had on them (e.g. emotions and cognitions when discovering the underperformance, the impact on their performance, and relationship with the underperformer), as well as their responses and why they had responded in a certain way. The duration of the interviews was 1 h on average. In each interview, we aimed to discuss three incidents. However, in three interviews, only two cases were discussed: two respondents had only had two experiences with underperforming co-workers in the past school year, and in one interview, time ran out after discussing two incidents. Moreover, from one interview, one case was dropped during analysis, since the underperforming co-worker in the case was an administrative staff member.

3.3 Analysis

The interviews were transcribed verbatim and coded with NVivo. The initial code tree was based on our theoretical framework (e.g. the categorisation of responses and influencing factors). During the coding process, the code tree was adapted and extra

codes and subcodes were added inductively. A second researcher was trained for coding and inter-rater agreements were calculated for seven interviews (20 cases). For certain codes, the coders obtained a moderate to high intercoder agreement from the start (Cohen's Kappa > 0.6) (Landis and Koch 1977), while other codes appeared to be more ambiguous and complex. These tentative codes and differences in interpretation were critically discussed, and codes and subcodes were more clearly defined, until sufficient agreement was reached (Butterfield et al. 2005). This process resulted in the construction of the final code tree (see Table 2), which represented the data as a whole. During the entire coding process, continuous discussions took place about unclear or complex interview fragments, and the researchers checked each other's coding (cf., Campbell et al. 2013).

We first analysed each code separately. For example, the subcode 'speaking up' was analysed to explore the range of responses that were coded under that category. Following the thematic analysis approach by Braun and Clarke (2006), themes and subthemes were then constructed by sorting and combining codes and re-reading the coded extracts. We made a schematic overview of the codes per case and searched for co-occurrences of codes, as these represented possible patterns in the data. For example, we examined patterns in explanations that were given for each type of response. In the final phase, the 'overall story' was constructed. To promote a reflexive and thorough analysis, the head researcher kept a methodological report (audit trail) throughout the data collection and analysis process, with first impressions of the interviews, reflections on the interview questions, and evolving interpretations, as well as remarks on the coding and analysis. These were regularly and thoroughly discussed by the research team (i.e. the authors), thereby increasing the quality and credibility of our findings (King 2004; Mortelmans 2007).

4 Results

First, we describe the incidents that were reported by our respondents. Subsequently, we present our results concerning the impact of teacher performance on co-workers, as well as the co-workers' responses.

4.1 Incidents of underperformance

Fifty-three incidents of underperformance were discussed in our interviews; 28 underperformers were women and 25 were men, aged 23 to 62 (mean age 45), who taught a diverse range of subjects. The incidents (N= 53) included a wide range of types of underperformance, including task underperformance and counterproductive work behaviour, student-related and team-related underperformance (see Table 3). Some cases included a combination of task underperformance (e.g. inappropriate behaviour towards both students and co-workers). In a few cases, respondents reported a lack of OCB, but only in combination with task underperformance or CWBs. The detection of the underperformance, its perceived duration, severity, and causes differed among cases, as well as the nature and quality of the relationship with the underperformance had been

 Underperformance Type Team-related Student-related Duration One-time incident Less than one school year More than one school year 	x x	x x	x x
 Team-related Student-related Duration One-time incident Less than one school year More than one school year 			х
 Student-related Duration One-time incident Less than one school year More than one school year 			х
 Duration One-time incident Less than one school year More than one school year 			
 One-time incident Less than one school year More than one school year 	x	X	
 Less than one school year More than one school year 	x	х	
3. More than one school year	x	х	
	х		
			х
2. Relationship with underperformer			
3. Commonality			
4. Common students	х	х	
4. Common department			х
4. Common work group/ project			
3. Professional relationship			
4. Good			
4. Bad			
4. Ambiguous	х	х	
4. Limited			х
3. Friendship			
2. Detection			
3. Oneself			х
3. Students			
3. Underperformer	х	х	
3. Co-worker	х		х
3. Principal			
3. Parents			
2. Causes			
2. Internal			
4. Knowledge/skills	х		
4. Resilience			
4. Motivation/attitude			х
4. Views on teaching/education		х	
4. Bad character/ personality			
3. External			
4. School			х
4. Tasks	х		
4. Students			
4. Private			
3. Do not know		х	
2. Impact	х	х	х
1. Responses			
3. Support/advice	х		

 Table 2
 Overview of code tree and coding of the presented cases

Table 2	(continued)
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Codes	Case 1	Case 2	Case 3
3. Moderate	x		
3. Speak up		х	
3. Compensate	х		
3. Silence	х	х	х
3. Distance		х	
3. Report to principal			
3. Report to co-workers	х		
2. Influencing factors			
3. Individual			х
3. Underperformance	х	х	
3. Underperformer			
3. Relational	х		х
3. Leadership		х	
3. Team		х	
2. View on co-workers' responsibility			
3. My task			
3. Not my task		х	
3. It depends	х		х
2. Principal's view on co-workers' responsibility			
3. My task			
3. Not my task			
3. It depends/unclear	х	х	х
1. Comments on HR, PM in the school	х	х	х
1. Comments on school team, culture, underperforming teachers		х	х
1. Other co-workers' responses			
2. Yes	х		х
2. No		х	
1. Principal's responses			
2. Yes			
2. No	х	х	
2. Unaware			
2. Do not know			х

going on longer than one school year, according to our respondents (N=30). Respondents had mostly observed the underperformance themselves (N=30), or had received reports from students (N=20). The perceived causes of the underperformance were mostly internal. Next to a lack of motivation (N=27) and difficult personality (N=21), a faulty view on teaching or of being a teacher was mentioned in multiple cases (N=13). Frequently reported external reasons included a lack of, or inadequate, performance management, or human resource practices in the school (N=24) or taught

	Student-related $(N=36)$	Team-related $(N=28)$
Task underperforma- nce (N=35)	 Inadequate teaching (i.e. teaching content, class management, student evaluation, didactics, teaching methods). Inadequate student administration and reporting. 	 No or limited participation in meetings and contributions to team work. Not following up on school/team procedures, arrangements or agreements with co-workers.
CWB (<i>N</i> = 35)	 Unethical, rude behaviour, or personal attacks towards students (e.g. belittling students). Intentionally minimising teaching effort (e.g. by showing movies in class). 	 Unethical, rude behaviour, or personal attacks towards co-workers. Intentionally withholding effort for team tasks or taking advantage of the work of others (social loafing). Intentionally breaking rules or arrangements, thereby undermining co-workers' work. Questioning co-workers, principals, or procedures in counterproductive ways (e.g. passive resistance, criticising co-workers in the presence of others). Illegitimate absences or sick leaves.
Lack of OCB $(N=5)$	• Never doing anything extra/minimal effort.	• Never doing anything extra/minimal effort.

Table 3 Reported types of underperformance (N = 53)

N = number of incidents

common students (N = 28). Cooperation was often limited (N = 21) or difficult (N = 25), according to our respondents.

We illustrate our findings by elaborating on three of the 53 incidents throughout the findings section. We chose this approach over using single quotations, to provide a more extensive, contextualised description of these cases. These three cases were not the most extreme or outstanding cases, but rather they were selected for their diversity in the types and perceived causes of the underperformance, as well as respondents' responses and factors influencing these responses. In Table 2, an overview of the coding of these three cases is provided. We report the incidents through the eyes of our respondents, without making any judgments or interpretations ourselves.

• Case 1. Respondent: Dave, 39, teaches religion. Co-worker: Nora, 34, teaches technical subjects.

In a teacher meeting, Nora started crying, saying that she could not handle the students of a certain class, especially during the last hours of the school days, blaming the students for their impossible behaviour. Dave sympathised with her, believing her side of the story. Later, he started receiving signals from other teachers that Nora also had problems with class management in 'easier' classes and that she explained the teaching content in the wrong way, which had led some students to ask other teachers for help. Dave then felt that Nora lacked competences in terms of teaching and in class management and believed that the problem has been going on for three years, since she started working in the school, and that the students were in fact the victims: she got 'difficult students' expelled, because she could not handle them, and they misbehaved because of her lack of teaching competences and subject knowledge.

• Case 2. Respondent: Annie, 58, French teacher. Co-worker: Marc, 36, music teacher.

In a teachers' meeting, Marc disclosed that he had been tutoring a struggling student in his free time, at his house, and during school breaks, having regular contact with his parents. He did this tutoring for all the subjects the student was struggling with, including French, Annie's subject. Annie considered his behaviour was wrong, and that he was crossing a line by inviting the student to his house and favouring this particular student over other struggling students. Annie describes Marc as a hardworking, committed, and friendly teacher. She supposes that he had good intentions towards the student, and that he favours the student over other students since he is a very good musician (music is Marc's subject).

• Case 3. Respondent: Amy, 28, English teacher. Co-worker: Margret, 57, English teacher.

Amy and Margret teach English at the same grade. When Margret was on sick leave, Amy temporarily took over one of her classes (in May). She discovered that since September, the students had not had any tests from Margret. Later, when the students complained that Amy's lessons and tests were too difficult, she discovered that Margret had set the bar much too low. She also discovered that too often, Margret had let students study on their own in class, being too lazy to teach, according to Amy. Amy explains that Margret is mostly friendly to other teachers and tries to keep up her image by volunteering to lead departmental meetings, while, at the same time, never following up on agreements made with other language teachers (e.g. she refuses to use the new handbook). Amy sees her as an overall underperformer, who is bitter, demotivated and not in touch with today's students. Rumour has it that she applied for the principal position years ago, but did not get it, causing her to become even bitterer. Moreover, Amy has her doubts about Margret's sick leave, since she has been on sick leave every year for at least one month.

4.2 The impact of teacher underperformance on co-workers

When discussing the impact of the incidents, our respondents mentioned both the impact of the underperformance itself, as well as the additional impact of and related concerns about their principals' responses.

4.2.1 Impact of the underperformance

Dependent on the type of incident, our respondents affected by the underperformance in different ways. In some incidents of team-related underperformance, the respondent was the direct target of the underperformance (e.g. of the underperformer's rudeness). In other incidents, the entire team was affected (e.g. by the underperformer's lack of effort). In cases of student-related underperformance, the impact on our respondents was more indirect, e.g. perceiving that one's authority is undermined because the underperformer allows students to break the rules. Some respondents received student complaints, or had to take over certain student-related tasks. In a few cases, the underperformer requested help or advice from the respondent. In other cases, respondents merely witnessed the underperformance, without it affecting their work or taking up their time. However, regardless of the specific nature of the underperformance, all respondents expressed feelings of frustration, anger, incomprehension, shock, disappointment, disillusion, or sadness. They felt that the underperformance was unfair to the victims of the underperformance, as well as to other, hardworking teachers. For example:

- CASE 2: Annie was very surprised by the home-tutoring, convinced that Marc had crossed a line by inviting the student to his place, and that there were other, more appropriate ways of helping struggling students. She also considered that it was unfair towards the other struggling students, who could feel disadvantaged by Marc.
- CASE 3: Amy explained that Margret's underperformance upset her a lot. She felt angry, bewildered by Margret's behaviour, stating that it was unfair towards hardworking teachers, such as herself. She also felt powerless to change the situation, frustrated with Margret's attempts to keep up appearance, and empathised with Margret's students, who were disadvantaged for having Margret as their teacher.

Our respondents related the strength of their emotions to the severity of the underperformance, perceived causes (e.g. lack of motivation led to strong negative emotions), how widespread and long-term the underperformance was, who the victim was, or how badly the students were affected. Moreover, five respondents expressed regrets regarding their initial reactions to the underperformance, or were mad with themselves for not detecting the underperformance sooner. One respondent admitted that his frustrations about the illegitimate absences of his colleague (a form of CWB) made him exhibit similar misbehaviour on an open school day.

Next to negative emotions, which were reported in all incidents, respondents also mentioned more positive feelings in four cases, i.e. feelings of sympathy or compassion towards the underperformer:

• CASE 1: Dave sympathised with Nora, since she was a very nice and friendly woman and did not receive adequate support when she started teaching in the school.

4.2.2 The additional impact of the principal's actions

Seventeen respondents expressed how their principal's responses to the incidents and/or handling of teacher underperformance in general reinforced their negative feelings and made them pessimistic about change. Respondents reported principals who were unaware of performance issues, or aware but passive and tolerated the underperformance:

- CASE 1: Dave also expressed frustrations about the school, since Nora did not receive any support when she started teaching; her predecessor had not left any teaching materials for her and her performance had never been evaluated. He considered this to be especially problematic since she was trained as a maths teacher, and not for technical subjects. In the past decennium, the school had had multiple principals, none of them had properly handled personnel management, according to Dave, and none of them were aware of Nora's underperformance.
- CASE 2: In the teacher's meeting, neither the other teachers, nor the Vice-Principal, reacted when Marc told about the home-tutoring. When Annie carefully expressed that she felt that the home-tutoring went too far, everyone remained silent. She was very surprised and upset by this.

Our respondents considered this lack of response to be unfair towards hardworking teachers, such as themselves, which made them feel underappreciated. They reported cases in which principals did not respond because they were friends with the underperformer, did not dare to confront (e.g. a young principal vs. an experienced underperformer), felt unable to change the situation, expected co-workers to respond themselves, lacked the necessary skills, or had just started their job and had other priorities. Certain respondents also perceived that their principals only responded in cases of student-related underperformance following complaints from students and parents.

In four cases, respondents spoke more positively about their principal's handling of the underperformance, e.g. mentoring or confronting the underperformer, or acting on the respondent's report of the underperformance. In addition, three respondents empathised with their principal's difficult task of dealing with underperformers, acknowledging that teacher tenure contracts limited their abilities to tackle underperformance:

• CASE 3: Amy assumed that her principal was aware of some of the problems, since she had hinted to Amy that she questioned Margret's absences. Amy believed that the principal was powerless to handle Margret's underperformance, because of her tenure and position as a union representative.

Some respondents also expressed more general concerns and frustrations about inadequate performance monitoring and evaluation in the school, a lack of mentoring and coaching, too much professional freedom for teachers and 'soft' management.

In summary, our findings indicate that dependent on the incident, our respondents were more directly or indirectly affected by the underperformance. Regardless of the incident, however, all incidents provoked negative emotions with respondents, which were often reinforced by concerns about a lack of responses by the principal, to the specific incident or more in general.

4.3 Co-workers' responses to the incidents

Here, we will discuss how co-workers responded to the incidents and how they explained their responses. In Fig. 1, we provide an overview of our findings.



Fig. 1 Reported co-worker responses, influencing factors, and related considerations

4.3.1 Speaking up towards the underperformer or principal

In 31 incidents, respondents spoke up to the underperformer. Almost all respondents explained that they did this carefully; for example, by carefully asking questions about certain behaviour without criticising, expressing their own opinions without demanding the underperformer to change his/her behaviour, or explaining the impact of the underperformance on themselves. Most respondents also said that they spoke up in a positive and motivating manner, sometimes through humour, sometimes anonymously (e.g. 'some teachers are late with their reports'), instead of explicitly or directly confronting the underperformer. Many respondents mentioned that they were not in a position to reprimand or judge co-workers or demand better performance, but could only mention their own opinions and concerns. Some respondents only spoke up about one aspect of the underperformance.

• CASE 2: In the teacher's meeting, Annie carefully mentioned that she thought that Marc had gone too far in inviting the student to his home.

Some respondents spoke up out of necessity (sometimes without considering it to be their job to respond in general) because they were personally affected by the underperformance (e.g. by underperformer's rudeness), or because students, or a common project or team were affected. In the latter cases, some respondents felt responsible to respond since they were the coordinator of the mutual project or chairperson of the department that was harmed by the underperformance. Other respondents spoke up because their principal or a coworker advised them to. Respondents also explained that they felt more authorised to speak up if they witnessed the underperformance themselves, or perceived that the underperformance had been caused by a faulty view on teaching or education. Having a good relationship with the underperformer made it easier to speak up, according to some respondents (while others indicated that it made it harder, out of fear of harming the relationship). Other respondents explained that the collegial, open atmosphere in their department, or team facilitated speaking up. Finally, some respondents related their decision to speak up to their personality, i.e. because they were blunt, or their belief that one should always provide honest feedback to co-workers. In 18 cases, respondents spoke to the principal about the incidents, because of the severity of the underperformance (cf., need for disciplinary actions), since they were confident that the principal would take action (based on past experiences), or convinced that it was the principal's responsibility to respond. In some cases, other coworkers advised the respondent to report the underperformance to the principal. Additionally, in 20 incidents, respondents talked about the underperformance with co-workers, mostly to express their frustrations, for emotional support, or to complain about the underperformer.

4.3.2 Silence towards the underperformer and/or the principal

Our respondents decided to remain silent towards the underperformer in 22 incidents. In 15 cases, the respondent never talked about the underperformance with the underperformer, nor reported the underperformance to his/her principal.

Some respondents said that it was unnecessary to respond, since they expected their principal to deal with the problem. Others expected the problem to be resolved on its own (e.g. the underperformer will leave in the next school year). Some respondents explained that they did not consider themselves to have the mandate, authority, or competences to question or react to a co-worker's underperformance ('Who am I to question my co-worker's teaching?'). Others considered it 'not done', or said that it made them feel uncomfortable, especially when the underperformer was a more experienced, older teacher; when their cooperation with the underperformer was very limited, in cases of student-related performance in another subject (making it difficult to judge their teaching); or when the underperformance was signalled by students (were their reports to be trusted?):

• CASE 1: Dave kept silent to Nora about his doubts about her competences, since he did not consider himself trained to evaluate her lessons or competences. Moreover, he explained that confronting co-workers takes courage and he found it difficult to speak up since he had no direct involvement in the incidents.

Some respondents did not consider it their responsibility to deal with underperforming colleagues and considered it the principal's job, in this specific case, or in general. The latter were mostly older, more experienced teachers, such as Annie (age 58): • Case 2: In general, Annie did not consider it her task to give feedback to coworkers, nor to report them to the principal. Moreover, she considered this to be tattling on co-workers. She saw herself as part of the 'old generation of teachers', who are less open to observe and appraise others' teaching, since they were not trained to do this.

Moreover, most respondents were unsure about whether their principal considered it their responsibility to respond to underperforming teachers.

Other respondents feared that speaking up would harm their relationship with the underperformer and, therefore, decided to remain silent. Respondents related these fears to their personality and tendency to avoid conflict, or to the difficult personality of the underperformer. Others feared for counterproductive consequences, for example an increase in the underperformance, or the underperformer going on sick leave when confronted with his/her underperformance. Some non-tenured teachers feared that speaking up would harm their chances to obtain tenure:

• CASE 3: Amy informed some co-workers about Margret's underperformance, and some advised her to report it to the principal. She did not do that, however, since she did not consider it her task and she did not dare to, because she did not want to compromise her chances to obtain tenure (and considered Margret to be higher in rank). However, if her principal would ask her about her cooperation with Margret, she thought she would dare to mention some problems.

Moreover, some respondents felt unable to speak up because of a lack of openness to observe and discuss each other's performance:

• CASE 2: After the meeting, Annie decided that it was best to keep silent, since no one had reacted to her concerns about the home-tutoring. Moreover, she felt there was no openness in the team to talk about others' performance, because of too much gossip and 'bad apples' ruining the team's atmosphere.

Others explained that responding would be pointless or futile; they felt that they would not be heard or able to affect the performance. Some felt that the principal would not act on their report (e.g. the principal was aware but unresponsive, or there was a lack of performance management in the school in general). Others were discouraged by co-workers to speak up to the underperformer and/or the principal. Some respondents felt that it was impossible to change the underperformer. In some cases, this was preceded by unsuccessful attempts to impact the underperformance. For example, Annie felt that she had no impact on Marc's home-tutoring:

• CASE 2: At the time of the interview, Marc was still tutoring the student, regularly asking Annie about the student's progress in French. Although she still felt frustrated, she did not mention her opinion on the tutoring any more, and responded briefly but in a friendly way to his questions, telling him what he needed to know.

4.3.3 Other responses

When asked about their responses, our respondents mostly talked about voice and silence towards the underperformer and/or the principal. To a lesser extent, they mentioned additional responses.

In eight cases, respondents decided to distance themselves from the underperformer, limiting their cooperation to the minimum, sometimes after perceiving that their responses did not have the desired effect. Two respondents decided to resign their position as head of the department that was affected by the underperformance, to avoid further incidents with the underperformer.

In five cases, respondents offered help, advice (e.g. about class management), or emotional support to the underperformer, since the underperformer had asked for help, the respondent had a good relationship with the underperformer and/or the underperformance was caused by psychological or non-work-related problems:

• CASE 1: Dave emotionally supported Nora every time she talked to him about difficult students, since she was a nice woman and colleague. He also supported her in the teacher's meetings, blaming the students for their lack of discipline. (At the time of the interview, he had partly lost his empathy, since by then, he thought that she was part of the problem.)

In nine incidents, respondents compensated for the underperformance, for example by helping out their students, by taking over certain team tasks, or by giving the underperformer the least important team tasks:

• CASE 1: The team decided to change working hours for Nora, so that Nora would not have the most difficult students at the end of the school day.

Some principals involved co-workers in compensating actions, i.e. requiring coworkers to monitor the underperformer, or to double-check their tests and teaching content. In cases in which students reported the underperformance, our respondents tried to carefully respond to their complaints and/or to gently signal students' complaints to the underperformer, without taking sides or judging their co-worker:

• CASE 3: Amy compensated for Margret's underperformance by preparing additional tests and making up for gaps in the teaching content, since she felt that the students deserved this. She remained diplomatic towards the students, not saying anything negative about Margret. When the students later complained that Amy's tests and teaching were too difficult, she remained diplomatic as well, not mentioning that Margret set the bar much too low.

Two respondents, however, advised students to file a complaint to the school administration, since they felt that this was the only way to impact the underperformance and stimulate principal's action.

In summary, our respondents responded to the incidents in different ways, i.e. by remaining silent or speaking to the underperformer and/or the principal, distancing themselves from the underperformer, providing support or advice, or compensating for the underperformance. Respondents' explanations for these responses entailed four main themes: i.e. how they perceived the necessity to respond, their responsibility to respond, their authority to respond, and what impact they expected from a response (upon the underperformer, themselves, or their relationship). This was related to characteristics of the underperformance and (their relationship with) the underperformer, leadership and team factors, and individual factors (see Fig. 1).

5 Conclusion and discussion

With this study, we aimed to obtain a better understanding of the impact of teacher underperformance on co-workers, as well as co-workers' responses to this underperformance.

We found that all of our respondents knew at least two teachers who had been underperforming during the course of the school year (according to their perceptions). Respondents had mostly observed or experienced the underperformance at first hand. This suggests that, during teacher collaboration and teamwork, co-workers may learn about teachers' underperformance. Similar to studies in other work contexts (e.g. Neff 2009; Robinson et al. 2014; Taggar and Neubert 2004), our findings demonstrate that teacher underperformance can have a substantial emotional impact on co-workers. This is not only the case when they are the directly affected by the underperformance, but is also true in cases of student-related underperformance. Presumably, this type of underperformance creates strong feelings of injustice, since it is related to the ethical nature of teaching, i.e. the caring for students and their right to the best education possible (Hoy and Tarter 2004).

Despite these concerns, not all respondents spoke up to the underperforming teacher and/or the principal. Next to the nature, severity, and impact of the underperformance, there were several other factors that contributed to their decisions of how to respond, such as their relationship with the underperformer, responses by the principal and other co-workers, and other leadership and team factors (see Fig. 1). Our findings suggest that, together, these influences explain whether co-workers considered a (certain) response to be required, whether they considered themselves to have a responsibility and mandate to respond, and how they considered the use of responding. While concerns about the use of responding were also found in Attribution Theory studies, which suggest that co-workers consider the impact that they may have on the underperformance (Lepine and van Dyne 2001; Weiner 2010), and in voice & silence studies, which suggest that co-workers make a cost-benefit analysis before choosing a response (Milliken et al. 2003; Morrison 2011), considerations about feeling a mandate and feeling responsible to respond were less prevailing in these organisational studies. This may suggest that they are more prominent in our research context.

School factors, i.e. team and leadership factors, appeared to play an important role in these considerations. Concerning team factors, our findings suggest that the team climate can influence co-worker responses. Some respondents experienced a lack of openness in the team to discuss each other's performance. Moreover, it appears that related norms of teacher autonomy, collegiality, and seniority in these schools withheld co-workers from speaking up: some teachers generally did not consider it to be their responsibility, found it inappropriate to speak up to or judge co-workers, or feared that

speaking up would have negative effects on themselves or their relationship with the underperformer. These norms have also been used to explain why teachers sometimes collaborate on a more superficial level, are reluctant to discuss their own and others' performance, and oppose teacher leadership (Hargreaves 2001; Johnson and Donaldson 2007; Little 1990; Vangrieken et al. 2015). Limited cooperation with the underperformer also made it more difficult for respondents to speak up, while having a good professional relationship with the underperformer appeared to make it easier (at least for some respondents) to speak up or provide support or advice (cf. Schwappach and Gehring 2014). Together, these findings suggests that a stronger professional community in Flemish schools, i.e. intense collaboration, an open feedback climate, and sense of shared responsibility, could stimulate co-worker responses and 'normalise' talking about others' performance. In contrast to research in other disciplines, which has suggested that more experienced workers are more inclined to respond to or report underperformance (e.g. Gruys et al. 2010), we found that mostly older teachers in our sample did not consider it their task to speak up. This could indicate that privacy norms are changing in these schools and an evolution to more collective responsibility is taking place. On the other hand, it could also mean that negative experiences with speaking up cause teachers to become more reluctant to speak up in the future. Moreover, even if younger teachers consider it their task to respond, other considerations may prevent an actual response, e.g. confronting an experienced co-worker takes courage and may go against implicit norms of seniority in some schools (Johnson and Donaldson 2007). In this regard, some respondents mentioned that even their principals tended to keep silent to older underperformers. This may also explain some nontenured respondents' fears that responding would harm their chances of obtaining tenure, since they felt that it was 'not done' to judge more experienced co-workers.

A second overarching theme that emerged from our findings is the importance of school leadership. First, some respondents complained of limited performance monitoring, coaching, and development in their schools, which reinforced their feelings of injustice and unfairness and made them feel unappreciated for their hard work. Previous research also found that teachers' morale and job satisfaction are affected when they perceive inadequate principal responses to teacher underperformance (Cheng 2014; Menuey 2007). In addition, it made these respondents become pessimistic about principals' responses to specific incidents of teacher underperformance, and pessimistic about the use of responding themselves. Although few respondents reported an immediate impact on their own performance, research warrants that injustice perceptions can affect one's work performance over time, and provoke silent behaviour (Hung et al. 2009; Tremblay et al. 2010). Of course, teachers may not always be aware of principals' responses. As Page (2016) found in his study on teacher misbehaviour, confidentiality means that teachers do not always know how principals handle the situation, and teachers' morale may be affected as such. Second, while most of our respondents were prepared to follow their principal's advice or views on how to respond in these incidents, they rarely knew their principals' views on the subject. Therefore, postulating a clear vision of the co-worker's role in dealing with teacher underperformance could reduce these teachers' uncertainties about their responsibility and mandate to respond.

When co-workers perceived that it would be futile to respond, and/or they did not feel responsible or authorised to speak up, they remained silent, to the underperforming teacher and/or the principal. This may be detrimental for the school on different levels

(cf., Morrison 2014): when co-workers keep silent, or even distance themselves from the underperforming teacher, they may possibly sustain or even worsen the underperformance, which may not also cause further harm to everyone affected by the underperformance, but also to the underperforming teacher him/herself. This teacher may be unaware that others perceive him/her to be underperforming, and discussing the underperformance could have been a learning opportunity for the teacher. Moreover, our findings suggest that teacher underperformance is not always black-and-white (e.g. in case 2), and perceptions of underperformance may be caused by different views on education or the teacher's job (Rhodes and Beneicke 2003). Therefore, speaking up could be an opportunity to create a shared vision, which may also foster teachers' collaboration (Vangrieken et al. 2015). In addition, research suggests that silence may be harmful for the one who remains silent: self-suppression can affect a worker's well-being, job attitudes, and performance and can even cause turnover (Knoll and van Dick 2013; Vakola and Bouradas 2005; Whiteside and Barclay 2013). Silence may also be detrimental to the team's climate, reinforcing existing climates of silence (Edwards et al. 2009). Moreover, while discussing the underperformance with other co-workers helped some respondents to cope with the situation and make sense of the underperformance (cf., Felps et al. 2006), Detert et al. (2013) argued that peer discussions can also take up considerable work time and spread negative feelings in the team, thus affecting the work climate and team performance over time. In addition, our findings suggest that peer reporting appears to be limited to the most serious cases of underperformance (cf., Bowling and Lyons 2015; Neff 2009). However, in schools, principals often depend on peer report (Richardson et al. 2008). Especially team-related underperformance may be less visible to principals. Together, these dangers of co-worker silence suggest that, on different levels, schools could benefit when co-workers speak up about teacher underperformance. However, when respondents chose not to speak up, some respondents compensated for the underperformance by taking on some of the underperformers' tasks, or dealt with student complaints in a discreet manner. Moreover, some respondents only kept silent after attempting to speak up.

Our findings raise important questions about the nature of teacher performance and related responsibilities. First, they argue for a broad view on teacher performance: our findings suggest that teacher performance not only impacts students, but also team members and the school as a whole. However, in educational research, there is a strong focus on teachers' effects on student learning outcomes (Huber and Skedsmo 2016), and other responsibilities and outcomes are often disregarded. Combined with the knowledge that teacher collaboration and teamwork or important for education quality, our findings suggest that true attention should be paid (in research, policy, and practice) to teachers' non-teaching performance and its impact on the school, e.g. by making teachers' team performance an inherent part of teacher appraisals and job descriptions. Second, our findings pose the question of whether teachers have a responsibility to other team members, students, and their schools, when it comes to responding to incidents of perceived co-worker underperformance. At the same time, individual teachers should not be held accountable for how they respond to another teacher's underperformance. Similar to scholars who suggest that contextual aspects influence teacher quality, and should therefore be considered when fairly judging teachers' performance (Hallinger et al. 2014; Huber and Skedsmo 2017; Stronge 2013), we found that school factors, especially team and leadership factors, may hinder or enable teachers' responses to a co-worker's underperformance. Educational system factors should not be disregarded either. Applied to our educational context, previous research has found that Flemish principals experienced numerous difficulties when dealing with underperforming teachers, including a high workload (e.g. no middle management in schools), and a lack of the necessary support and training to handle teacher underperformance (Van Den Ouweland et al. 2016). In addition, Flemish secondary education does not have a long tradition of teacher evaluation (mandated teacher evaluation was introduced by the Government in 2007) (Tuytens and Devos 2017), and there are no formal programmes or systems of peer evaluation, assistance, or monitoring. These factors may also help to explain how Flemish teachers and principals respond to teacher underperformance. Therefore, our findings should be viewed in light of this educational context.

This brings us to the limitations of our study. First, since our research findings are linked to the Flemish educational context and given the qualitative nature of the study, our findings are not generalizable across teachers and educational systems. Large-scale follow-up research on co-worker responses is needed to test our hypotheses about factors influencing co-worker responses, and to build explanatory models for different types of responses. Moreover, our study relied on our respondents' memories and reports of the incidents, which may be distorted or incomplete (FitzGerald et al. 2008; Gremler 2004). Longitudinal case study research would allow us to study cases in real time and could also provide more insight into the dynamics of underperformance and collegial responses, including the impact of peer responses on underperformance. Moreover, while we studied responses at the individual level, individual responses are interwoven with others' responses, which may mutually influence each other. In addition, responses may also influence the underperformance, which may provoke new responses, and so forth. These dynamics could not be captured by our cross-sectional research. In addition, while co-workers' perceptions are key to their responses, we must emphasise that our incidents are not 'objective' reports; others involved could have different perceptions of the underperformance. Moreover, it is possible that our respondents were unaware of their principal's or other co-workers' actions. Therefore, it would be opportune for follow-up research to create triangulation in data sources (e.g. underperformers, co-workers, and principals) to shed light on the underperformance and on teachers' and principals' actions from different viewpoints.

In summary, our study indicates that teacher underperformance can have a substantial impact on co-workers. In addition, our findings provide more insight in how and why teachers respond in a certain way, and which factors may enable or hinder their responses. Our findings have important implications for educational research, policy, and practice, and they underline the importance of paying attention to co-workers when studying or dealing with teacher underperformance.

Compliance with ethical standards

Participation was anonymous and voluntary, and participants signed an informed consent stating the purpose and method of the study, as well as participant rights. The Ethics Committee of the University of Antwerp also approved the study.

Conflict of interest The authors declare that they have no conflict of interest.

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