# School Inspection Feedback: Unravelling Determinants and Consequences of Teachers' Feedback Acceptance

*Schoolinspectiefeedback: Het ontrafelen van de determinanten en de gevolgen van feedbackacceptatie bij leraren*

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# School Inspection Feedback: Unravelling Determinants and Consequences of Teachers' Feedback Acceptance

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# CONTENT

# GENERAL INTRODUCTION

*Setting the scene*

**ABSTRACT** *This chapter sets the scene for this dissertation and is divided into three sections. First, the chapter introduces the research topic and provides necessary background information about the fundamental concepts of this dissertation. Next, given the context-inclusive nature of this study, it describes the main contextual features of the Flemish educational system regarding accountability and school inspection. Finally, it explicates the central aims and methodology of this research and provides an overview of the dissertation's structure to show how each chapter contributes to the central aims of this dissertation.*

## 1. Setting the scene: school inspections, inspection feedback and teacher change

Various educational accountability systems share the same goal of improving student learning and achievement and building students' capacity to learn. In Europe, the use of school inspections to assess and hold schools accountable for goals related to educational quality and student achievement is well established (Gärtner, Wurster, & Pant, 2014).

The Organisation for Economic Co-operation and Development (OECD) defines a ***school inspection*** as a 'mandated, formal process of external evaluation' which 'involves one or more trained inspectors who evaluate quality based on a standard procedure' and which 'aims to hold schools accountable' (OECD, 2015, pp. 479). Although there is a wide variation in how the inspections are organised and how they use the information gathered in schools (OECD, 2015), Eddy Spicer et al. (2014) and De Grauwe (2007) have found that school inspections have certain characteristics in common: a school inspection is an external evaluation of schools, undertaken by 'school inspectors'. These are officials external to the school with a mandate from a national or local authority, who conduct regular inspection visits to all schools (Eddy Spicer et al., p. 91). During these visits, inspectors collect information about the quality of the school, check compliance to legislation and/or evaluate the quality of classroom practices and students' work through observations, interviews and document analysis.

Along with the accountability-oriented perspective that considers control as a first function of school inspectors, and which is strongly represented in both descriptions, there are also stakeholders who advocate the development and improvement purposes of inspections. According to Ehren (2016), inspection strategies, which aim to improve and support school development, include evaluation of the school quality, and identification of the school's strengths and areas for school development through the mechanism of providing inspection

feedback. In this dissertation, ***inspection feedback*** is defined as 'specific information on the school's strengths and weaknesses in accordance with a set of preconceived standards' (Ehren, 2016). During an inspection visit, this feedback may be situated at the interpersonal level during interactions between the inspector and school leaders or teachers, such as under the form of oral feedback during (classroom) debriefings. When the inspectors communicate their general findings to school under the form of a written inspection report, this feedback is situated at the school organisational level (Ehren, 2016). Schools are supposed to accept this feedback and implement actions to eliminate the deficits (Coe, 2002)

In addition to school improvement purposes, educational stakeholders often consider 'changing the behaviour of teachers' as another intended outcome of school inspections. Inspection feedback can support teachers to make substantial changes to their existing practices and teaching instructions when it relates to the overall quality of teaching and learning (Baxter, 2017; Nelson & Ehren, 2014). ***Teacher change***, which is defined in this dissertation as 'the provision of activities designed to advance the knowledge, skills, and understanding of teachers in ways that lead to changes in their thinking and classroom behaviour' (Fenstermacher & Berliner, 1983, pp. 4) is often seen as one of the key levers for successful school improvement (Grossman, Wineburg, & Woolworth, 2001; Richardson & Placier, 2001) and overall student achievement (Barber & Mourshed, 2007). While several researchers have studied whether and how inspections enhance development and improvement at school level (e.g. Ehren et al., 2015; Gustafsson et al., 2015; Penninckx, Vanhoof, De Maeyer, & Van Petegem, 2016), there is limited research examining if and how inspections stimulate teacher change through the mechanism of inspection feedback. More specifically, even though feedback is generally seen as a tool to improve teacher performance (e.g. Cheetham & Chivers, 2005; Colvin et al., 2009), the question remains whether inspection feedback enhances teachers' performance as most inspections are not allowed to provide interpersonal feedback to teachers and provide only feedback at the school organisational level. In addition, in some educational contexts, inspectors are not allowed to provide constructive feedback to schools about how teachers can improve their personal practices, but are – in theory – limited to feedback on the schools' strengths and weaknesses instead. Recent research indicated, however, that school inspectors provide a number of practical tips off the record to strengthen the classroom practice directly to teachers (Penninckx et al., 2014; Dobbelaer, Godfrey, & Franssen, 2017). These examples stress the need for further research that examines teachers' experiences with inspection feedback and their preferences and perceptions about the relevance of these sources.

Moreover, the extent to which teachers are willing to engage in change processes based upon inspection feedback that they have received, has not been examined yet (Penninckx & Vanhoof, 2016). Given the amount of resources being allocated to school inspections, we propose that it is critical to understand and unravel which factors contribute to teacher change through the mechanism of inspection feedback.

Adopting this perspective, we will zoom in on the feedback process at the teacher level in this dissertation. As feedback is inevitably processed through the teachers' lenses, the main aim of this dissertation is to examine how teachers process inspection feedback in order to understand when and how teachers are accepting and willing to use the feedback (or not) and what factors influence those interpretations. To gain new insights into this process, evidence from solid research is required. If educational researchers are interested in the way inspection feedback is processed and used by individual teachers in inspected schools, they need to understand which variables make a difference in the feedback process. Therefore, we combine two strands of research that have been treated as separate issues up to date: previous studies on school inspection research and studies in the organisational psychology on individuals' feedback acceptance.

In the following section, we present the theoretical framework and the most important concepts that will serve as a foundation for this dissertation. An overview will provide insight in what is already known and where the knowledge gaps are situated within the research field and the literature.

### 1.1 Processing feedback: teachers' acceptance of inspection feedback

The relationship between receipt of the feedback and an individual's reaction to this feedback is theoretically represented in the feedback model of Ilgen, Fisher, and Taylor (1979) (see Figure 1). This parsimonious model suggests how a recipient reacts to and uses feedback and is widely used for generating hypotheses regarding feedback effects in the field of (organisational) psychology (e.g. Fedor, 1991; Kinicki et al., 2004).

Earlier non-educational studies on feedback effects used bivariate statistics to examine the relationship between feedback and other variables proposed in the model and did not take the interplay between the different feedback components of the model into account, while more recent studies do shed light on this interplay (e.g. Kinicki et al., 2004; Son & Kim, 2016; Christensen-Salem, Kinicki, Zhang, Walumbwa, 2018). When it comes to studies in the field of school inspections, it has been argued that measuring relationships between inspection and

school improvement is methodologically challenging due to the many internal and external factors that influence this process of change (Matthews & Sammons, 2004; Wilcox & Gray, 1996; Penninckx, Vanhoof, De Maeyer, & Van Petegem, 2014). This dissertation aims to respond to this need for a more in-depth examination of how inspection feedback is perceived and reacted to by teachers.

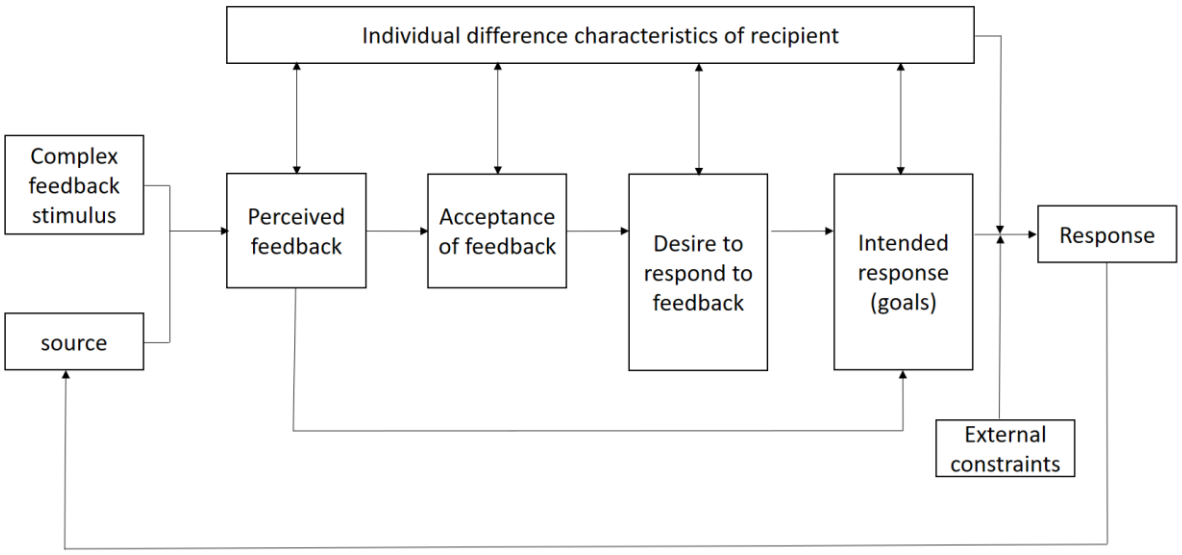


**Figure 1.** Model of the effects of feedback on recipients (Ilgen et al., 1979)

The feedback process model of Ilgen et al. (1979) proposes that feedback acceptance plays a key role in determining an individual's reaction to feedback. This assumption has been substantiated in empirical research on feedback effects within organisational contexts (e.g. Anseel & Lievens, 2009; Brett & Atwater, 2001; Kinicki et al., 2004). Feedback acceptance refers to 'the feedback recipient's perceptions that the feedback received is an accurate portrayal of their performance' (Anseel & Lievens, 2006, 2009; Ilgen et al., 1979, pp. 356). In this dissertation, ***feedback acceptance*** refers to teachers' perceptions about the accuracy of the inspection feedback received.

Inspection feedback typically only addresses school-level processes on student learning, rather than on the impact of teachers' individual classroom practices, because most inspectors are not allowed to provide feedback to individual teachers (OECD, 2015a). Ilgen et al. (1979) propose, however, that feedback at the organisational level is useless if the organisation's stakeholders do not accept it. From this viewpoint, teachers' feedback acceptance is required to support school improvement plans, to understand the benefits of innovations, and to feel secure in their role as implementers of particular actions (Leithwood, 2000). Studies have nevertheless demonstrated

that many teachers do not accept inspection feedback nor are they willing to change their teaching after an inspection (Chapman, 2001). For example, teachers' perceptions of the extent to which this feedback is relevant and the manner in which the inspection feedback is framed or presented are found to influence teachers' reaction to feedback and they this feedback influences school improvement (Fidler et al., 1998).

Non-educational research suggests that cognitive responses and affective responses are often seen as predictors of feedback acceptance (e.g. Ilgen et al., 1979; Brett & Atwater, 2001; Brinko, 1993; Leung, Su, & Morris, 2001; McDowall & Fletcher, 2004). Little research is available on how teachers' cognitive and affective responses are related to their acceptance of inspection feedback.

## 1.2 Cognitive responses regarding feedback

***Cognitive responses*** refer to feedback recipients' perceptions (or thoughts) regarding source credibility (expertise and trustworthiness), feedback fairness (distributive and procedural justice), and features of feedback (feedback sign, constructiveness, clarity, and relevance). These responses have been widely discussed as significant factors for feedback acceptance in organisational psychology (e.g. Brett & Atwater, 2001; Greller & Herold, 1975; Ilgen et al., 1979; Leung et al., 2001). We will briefly discuss these variables, and provide evidence from educational and non-educational contexts.

### 1.2.1 Source credibility

In their feedback theory, Ilgen et al. (1979) posit that in order to increase feedback acceptance, a feedback source needs to display source credibility characteristics, such as trustworthiness and expertise. When a source is perceived as credible, recipients are more likely to accept their feedback (e.g. Audia & Locke, 2004; Ilgen et al., 1979; Gray et al., 1999). ***Trustworthiness*** represents the degree to which a feedback recipient trusts the feedback source's intentions and motives as being free from biasing factors at the time of feedback (Steelman & Rutkowski, 2004). ***Expertise*** refers to the degree to which a feedback source is perceived as capable of making accurate assertions (Brinko, 1993).

In inspection contexts, inspector credibility is important in ensuring a positive inspection experience for schools (Ehren, 2016). Dean (1995) found that teachers in primary schools are often reluctant to accept feedback from school inspectors with another educational background. According to Ehren (2016), most inspectorates engage in strategies that promote their credibility. They rely on positive relationships between inspectors and members of the school staff through interactions with staff members (for example, joint observations of lessons in

schools, personal invitations to respond to the inspection report, and feedback debriefings) to increase schools' acceptance of standards and feedback (Ehren, Altrichter, McNamara, & O'Hara, 2013). While qualitative studies suggest that teachers are more likely to accept inspection feedback when inspectors are perceived as professional and collegial, even when the feedback is less favourable (e.g. Erdem & Yaprak, 2013; Kelchtermans, 2007), quantitative evidence of this relationship is rather scarce.

### 1.2.2 Organisational justice

If school inspections attempt to drive quality improvements in schools, then it is essential that the inspection procedure and the inspection report are acknowledged by the school staff as a valid and reliable evaluation of the school's efforts and achievement. This increases the staff's willingness to accept the recommendations in the report (Kelchtermans, 2007, p. 484). The term **organisational justice** refers to 'the extent to which individuals perceive evaluation outcomes, processes and interactions to be fair in nature' (Cropanzano & Greenberg, 1997). Based on organisational literature, in this dissertation, a distinction is made between procedural and distributive justice (Colquit, Conlon, Wesson, Porter, & Ng, 2001).

***Procedural justice*** relates to the perceived fairness of the evaluation process through which information was gathered to determine the outcomes (Colquit et al., 2001; Cropanzano, Bowen, & Gilliland, 2007). When individuals perceive these procedures as transparent and bias-free, feedback is more likely to be accepted (Colquit et al., 2001). School inspection research has, for example, shown that efforts of school inspectors to increase the transparency of the inspection process (such as very detailed prescriptions to be followed by inspectors in making their judgements) strengthen schools' satisfaction with inspections and their outcomes (Wilcox & Gray, 1996). Furthermore, clear inspection expectations regarding educational quality, and willingness of inspectors to engage in a professional dialogue influence teachers' perceived fairness and their willingness to accept the inspection feedback provided (Gustafsson et al., 2015; Thomas, Yee, & Lee, 1996).

***Distributive justice***, defined as the perceived fairness of the evaluation outcome (or consequences of the decisions), is positively related to feedback acceptance (Colquitt et al., 2001). Leung et al. (2001) found that feedback recipients more readily accept negative feedback when they perceive the feedback to be correct. Regarding teachers' acceptance of inspection feedback, only one study described the importance of teachers' fairness perceptions concerning

the inspection outcome. Kelchtermans (2007) indicate that teachers are more likely to reject negative feedback in inspection reports when it is perceived as unfair.

### 1.2.3 Characteristics of feedback

According to several authors, the most critical characteristics of effective feedback are feedback sign (is it positive or negative?), constructiveness, clarity, and relevance (e.g. Geddes & Linnehan, 1996; Ilgen et al., 1979; Kluger & Denisi, 1996). These findings are in agreement with empirical non-educational studies (i.e. research in domains other than education, such as psychology and philosophy) that examine feedback acceptance (Brett & Atwater, 2001; Tonidandel, Quinones, & Adams, 2002). Research that empirically tests whether these characteristics are related to teachers' feedback acceptance and use in a school inspection context is, however, scarce. Penninckx et al. (2016) concluded that inspection quality is the strongest predictor of conceptual and instrumental inspection effects but did not further specify which component (the quality of the inspector's behaviour, the inspection's psychometric quality (fairness perceptions of the inspection process and outcome) and/or the transparency of the inspection) is the strongest determining predictor. In addition, Behnke and Steins (2016) demonstrated that feedback quality is one of the key factors influencing the effect of inspections on principals. However, they did not specify which feedback characteristics contribute to perceptions of high-quality feedback, nor did they take into account teacher reactions to feedback. These examples address the need for a comprehensive view of the role that teachers' cognitive responses to the inspection process play in the acceptance of inspection feedback. Thus, next to the focus on inspector credibility and procedural and distributive justice, this dissertation also incorporates a focus on the following characteristics of feedback: feedback sign, feedback constructiveness, feedback clarity, and feedback relevance.

***Feedback sign***—that is, whether the feedback signals success or failure—is often considered as a key characteristic for feedback acceptance, as researchers state that a negative feedback sign (compared to a positive feedback sign) is more likely to lead to feedback rejection (Ilgen et al., 1979; Kinicki et al., 2004). Past research, however, has produced inconclusive results regarding the effect of feedback sign on an individual's performance (Kluger & DeNisi, 1996; Lechermeier & Fassnacht, 2018) and found, for example, that perceptions of feedback constructiveness and source credibility influence the effectiveness of feedback too.

***Feedback constructiveness*** is defined in this dissertation as the extent to which feedback is perceived as helpful to improve or promote further development. According to Hattie and

Timperley (2007), constructive feedback engenders less negative reactions in contrast to destructive criticism. Ideally, feedback contains feed forward (e.g. improvement suggestions about productive ways of focusing the work on task) (Hattie & Timperley, 2007; Ehren, 2016). This is not self-evident in the case of inspection feedback as many inspectorates (as in Flanders) are in principle not allowed to give improvement suggestions to school leaders and teachers (Penninckx et al., 2016).

***Feedback clarity*** refers to the extent to which the feedback message is perceived as straightforward and direct, as opposed to ambiguous and open to interpretation (Geddes & Linnehan, 1996). Teachers are often dissatisfied about the lack of detail of inspection feedback and the lack of guidance on how to implement the feedback (Ferguson, Earley, Fidler, & Ouston, 2000; McCrone et al., 2007). According to Matthews & Sammons (2004), explicit and clear inspection feedback is more helpful in developing school improvement plans and lead to more effective actions by the school. Studies in the field of psychology emphasise the importance of understandable feedback too (Crommelinck & Anseel, 2013). Vague descriptions of problematic shortcomings can leave feedback recipients poorly informed about the current situation and can promote feedback rejection (Audia & Locke, 2003).

Finally, teachers are more likely to accept inspection feedback when the feedback content is ***relevant*** to them (Ehren & Visscher, 2008). As inspectors provide feedback on different aspects of the school, such as quality development, pupil guidance, achievement of educational objectives, the school's habitability, safety and hygiene, it is also important to identify when feedback on these aspects is considered relevant to the teachers.

### 1.3 Affective responses

Feedback does not only elicit cognitive reactions, it also elicits affective responses to feedback. **Affective responses** to feedback refer to how the feedback makes a recipient feel in terms of emotions (Chen, Liao, Wu, & Zhang, 2017). Feedback research demonstrates that these affective responses can interfere with feedback acceptance as well (e.g. Brett & Atwater, 2001; Kluger & DeNisi, 1996; Sargeant et al., 2008). In research on school inspection, it is generally accepted that school inspection visits can entail unintended negative consequences, such as an emotional impact on the school staff (e.g. Ehren et al., 2013; Gray & Gardner, 1999; Penninckx & Vanhoof, 2015; Perryman, 2006, 2007, 2009; Quintelier et al., 2016; Scanlon, 1999; Sutton & Wheatley, 2003).

We identify three gaps in the literature regarding affective responses in a school inspection context. Before further elaborating on these gaps, we first define emotions, a term that often functions as an umbrella term. Then, we explain our choice for Parrot's (2001) tree-structured emotion classification.

### 1.3.1 Conceptualisation of emotions

Fehr and Russel's (1984, pp. 464) statement that "everyone knows what an emotion is until asked to give a definition", is still relevant in the current state of emotion research. Even though many authors refer to emotions in their articles, the conceptualisation of this term remains elusive (Gendron & Barrett, 2009; Scherer, 2005; Sheppard, Katz, & Grosland, 2015). Authors tend to assume that there is a general consensus about the content of this concept, although the literature does not reflect this mutual perception of what constitutes 'emotions' (Sheppard, Katz, & Grosland, 2015). Most researchers use a definition of emotion so that it reflects their theoretical viewpoints including affective, cognitive, physiological, disruptive, adaptive, or motivational definitions (Oatley, 2000; Sander, 2013). As a result of this variety of interpretations, a number of researchers advocate the need for a conceptual framework and a common vocabulary in order to discuss and analyse emotion research (Hargreaves, 2005; Linnenbrink-Garcia & Pekrun, 2011; Meyer & Turner, 2006).

Recently, some agreement on the structure and functions of emotions has been reached, as the key characteristics of emotions were identified (see Sander, 2013): (1) emotion consists of multiple components; (2) emotions have a brief duration and can change thus rapidly; (3) emotions have relevant objects (whereas moods are not); and (4) emotions are two-step processes as they are involving emotion elicitation mechanisms that produce emotional responses. By distinguishing these categories, Sander (2013) emphases the importance of appraisal as the cognitive antecedent of an emotion.

In line with cognitive psychological theoreticians (e.g. Frijda, 1993; Lazarus, 1991; Roseman & Smith, 2001), appraisal theory suggests that the individual's evaluation (or appraisal) of situations and events, rather than the events themselves, elicits emotions (affective responses). These appraisals arise from the individual's beliefs, previous experiences and personal theories about the world, and whether or not the situation is relevant to their needs or well-being and whether this situation is consistent with their goals (Lazarus, 1991, 1993). This entails that the same event can elicit different emotions in different people (Lazarus & Folkman, 1984; Sutton &

Wheatley, 2003). It remains, however, a complex process and there is no research that has completely identified all of these elements.

Previous non-educational research has focused on the role of emotions and cognition regarding feedback recipients' learning, motivation and feedback acceptance (e.g. Brett & Atwater, 2001). In school inspection research, this relationship is largely unexplored and needs to be further investigated in order to understand how inspection feedback is processed by teachers.

### 1.3.2 Classification of emotions

Before introducing the classification of emotions used in this dissertation, it is interesting to know that emotions can be categorised in many ways, such as approach-related versus avoidance-related, self-reflexive, aesthetic, make-believe, counterfactual, social, moral, and epistemic emotions (Sander, 2013). Besides these different classifications, a dichotomous classification of emotions into positive and negative emotions is the most common in the literature (Chen, 2016; Sander, 2013). Positive emotions generally include happiness, pride, relief, hope, satisfaction, and excitement, while negative emotions include anger, anxiety, fright, guilt, sadness, envy, jealousy, disgust, and sadness (Hargreaves, 1998; Lazarus, 1991; Sutton & Wheatley, 2003). One limitation of this dichotomous classification is that some emotions are difficult to classify (Kristjánsson, 2007; Sutton &Wheatley, 2003). Surprise, for example, has been depicted as an emotion that can be both positive and negative (see Fontaine, Scherer, Roesch, & Ellsworth, 2007).

The classification of emotions that is used in this dissertation is the tree-structured classification proposed by Parrot (2001), who divides basic emotions into secondary and tertiary emotions (see Table 1). Parrott indicates that, although many aspects of emotions tend to be treated as if they are distinct, a connection between varying emotions can be identified. Irritation and torment, for example, derive from the same primary emotion of anger, while both zest and cheerfulness stem from joy. People who experience these emotions are often unaware that they are related. Parrott identifies more than a hundred emotions and grouped them within six primary emotions: love, joy, surprise, anger, sadness and fear. The secondary division contains more emotions within each primary emotion group. Table 1 also shows a third level, which is a continuation of the branches from the secondary emotion group.

This dissertation uses Parrot's classification because it has already proven its applicability in scientific educational emotion research that examined the role of teacher emotions in classrooms on their teaching approaches. (Bahia et al., 2013; Chen, 2016, 2019). This classification

gives a comprehensive overview of human emotions and provides an insightful awareness of how teachers' emotions are interrelated at different levels (Chen, 2016). We believe this classification is useful to create a rich understanding of the different affective responses of teachers in the inspection context, and to investigate whether it is applicable in inspection research too.

**Table 1.** Parrott's emotions by group

| Primary emotion | Secondary emotion | Tertiary emotion |
|---|---|---|
| **Love** | Affection | Adoration, Fondness, Liking, Attractiveness, Caring, Tenderness, Compassion, Sentimentality |
| | Lust | Arousal, Desire, Passion, Infatuation |
| | Longing | Longing |
| **Joy** | Cheerfulness | Amusement, Bliss, Gaiety, Glee, Jolliness, Joviality, Joy, Delight, Enjoyment, Gladness, Happiness, Jubilation, Elation, Satisfaction, Ecstasy, Euphoria |
| | Zest | Enthusiasm, Zeal, Excitement, Thrill, Exhilaration |
| | Contentment | Pleasure |
| | Pride | Triumph |
| | Optimism | Eagerness, Hope |
| | Enthrallment | Enthrallment, Rapture |
| | Relief | Relief |
| **Surprise** | Surprise | Amazement, Astonishment |
| **Anger** | Irritation | Aggravation, Agitation, Annoyance, Grouchy, Grumpy, Crosspatch |
| | Exasperation | Frustration |
| | Rage | Anger, Outrage, Fury, Wrath, Hostility, Ferocity, Bitter, Hatred, Scorn, Spite, Vengefulness, Dislike, Resentment |
| | Disgust | Revulsion, Contempt, Loathing |
| | Envy | Jealousy |
| | Torment | Torment |
| **Sadness** | Suffering | Agony, Anguish, Hurt |
| | Sadness | Depression, Despair, Gloom, Glumness, Unhappy, Grief, Sorrow, Woe, Misery, Melancholy' |
| | Disappointment | Dismay, Displeasure |
| | Shame | Guilt, Regret, Remorse |
| | Neglect | Alienation, Defeatism, Dejection, Embarrassment, Homesickness, Humiliation, Insecurity, Insult, Isolation, Loneliness, Rejection |
| **Fear** | Horror | Pity, Sympathy |
| | Nervousness | Alarm, Shock, Fear, Fright, Horror, Terror, Panic, Hysteria, Mortification |

*Source: Parrott (2001)*

### 1.3.3 Emotion research in school inspection context

More than a decade ago, little was known about the role of emotions in education and teaching (Denzin in Schutz & Zembylas, 2009). Research on how teachers' emotions were related to their teaching practices or the sociocultural context of teaching was hard to find (Sutton & Wheatley, 2003). However, due to the fact that more and more authors suggest that teachers' emotions are closely related to a variety of important outcomes, such as teachers' mental health and well-being (Chang, 2009; Keller et al., 2014), classroom effectiveness (Sutton, 2005), and student achievement and motivation (Pekrun et al., 2002; Frenzel et al., 2009), research on emotions has gained more attention (see Uitto, Jokikokko & Estola, 2015 for a review).

In the past decade, an increase in academic interest in the effects and side effects of inspection in diverse educational contexts took place (e.g. England, Germany, Ireland, the Netherlands, and Flanders) (Dedering & Muller, 2011; Ehren et al., 2013; McNamara & O'Hara, 2006; Penninckx, 2016). These studies found that school inspections have emotional consequences for the school and teaching staff. A review of Penninckx & Vanhoof (2015) encompasses 35 empirical studies regarding the emotional side effects of school inspections among school leaders and teachers. Although the review reveals that 28 of the reviewed studies provided data on negative emotions caused by inspection, only 16 studies provided data of emotional effects on teachers as a result of school inspection. In most of the reviewed studies, only a few researchers show a preference for quantitative research methods to qualitative methods when studying emotional side effects. In addition, the results of this review expose three other important theoretical and methodological shortcomings in the current research field that need to be addressed.

First, in each of the reviewed studies, negative emotional effects, such as anxiety and stress, were found, while positive side effects were hardly mentioned (McCrone et al., 2007; Ofsted, 2007). According to Penninckx and Vanhoof (2015), this could mean that school inspections do not elicit emotions of joy and happiness, but these findings can also demonstrate that the research community has neglected the issue of positive emotional effects. Since emotions of joy are found to be powerful sources for teachers' motivation, resilience, perseverance and job satisfaction (Gu & Day, 2007; Ofsted, 2007), it is important to examine whether an inspection can elicit them. However, as an inspection and its outcome can cause emotions of anger, frustration, and even depression (Nicolaidou & Ainscow, 2005; Wilcox & Gray, 1995), it is equally important to consider how these emotions can be reduced.

Second, the review identifies stress and anxiety as the most frequently reported emotional side effects of a school inspection. Many researchers documented the increase in stress before and during the inspection (Brunsden, Shevlin, & Davies, 2006; Kogan & Maden, 1999; Scanlon, 1999), but research evidence has shown that even in schools with a positive inspection outcome, an increased degree of stress and anxiety was registered prior to and after the inspection (Brunsden et al., 2006; McFadden, 2003). These findings indicate that teachers' experience of stress cannot be given an unambiguous meaning. Indeed, reporting emotional effects in terms of stress can result in a limited and oversimplified view of the experienced emotions (Lazarus, 2001). Non-educational research has shown that the experience of stress is an expression of underlying emotional responses to a specific situation or event (Dickerson & Kemeny, 2004; Folkman, 2008; Lazarus, 2001). Stress is often associated with a wide array of negative outcomes, such as depression, anxiety, and anger (Folkman, 2008; Lazarus, 2001), although Folkman (1997) also demonstrates that emotions such as joy can occur during periods of severe stress. Therefore, studies that directly measure the affective responses regarding a school inspection instead of the experienced levels of stress are needed in order to understand what emotions are experienced under which circumstances.

Finally, while research attention has been paid to the relationship between inspector credibility and emotional side effects, and between the inspection outcome and these emotional side effects (e.g. McNamara & O'Hara, 2006; Thomas, Yee, & Lee, 2000), there is little or no research that maps out the relationship between emotions and teachers' acceptance of inspection feedback. Non-educational research, however, shows that feedback can evoke strong affective responses that can negatively influence individuals' subsequent reaction to this feedback (Kluger & DeNisi, 1996; Brett & Atwater, 2001; Sergeant et al., 2005). These examples emphasise the need for more detailed investigations of teachers' emotions and of the interplay between emotions and cognition in school inspection contexts.

The aim of this dissertation to examine how inspection feedback is perceived by teachers and how they respond to this feedback, alongside the identified research gaps in emotion research, implies that the focus in this dissertation will also lie on teachers' experience of emotions. More specifically, this dissertation aims to examine the intensity of teachers' emotions during key moments in the inspection process with regard to the receipt of inspection feedback.

### 1.4 Teachers' willingness to use the inspection feedback received

Accepting feedback is by no means the same as using it, as the theoretical model of Ilgen et al. (1979) postulates no direct causal relationship between feedback acceptance and feedback use. Instead, the feedback model proposes a motivational phase in between that is called 'willingness to use the feedback'. Willingness to use feedback refers to the feedback recipient's desire to perform better based on the feedback received (Steelman & Rutkowski, 2004).

The relationship between feedback acceptance and a teacher's willingness to use the feedback received is rarely studied in an inspection context. Few studies have examined the extent to which teachers are willing to use the inspection feedback received. While previous studies point out that, on average, one-third of teachers intend to change their practices as a result of the inspection (Lowe, 1998; Ofsted, 1994), the study of Chapman (2001) shows that only one-fifth of the participating teachers were willing to change their practice as a result of the inspection feedback. The results of the latter study are in line with the results of a study by Gaertner, Wurster, and Pant (2014) who found that teachers and principals tend to judge the aspects of school quality as highly stable over time and did not report any change at all after the schools had been inspected.

Given the scarcity of recent studies on the role of teachers' willingness to use inspection feedback and to engage in processes of change, further research oriented towards the antecedents and consequences of this phase is urgently needed (Penninckx et al., 2016).

### 1.5 The role of awareness gained from feedback received

In addition to feedback acceptance, researchers also focus on individuals' awareness gained from feedback received as an influencing factor of an individual's willingness to use feedback (Plunier, Boudrias, & Savoie, 2013). Boudrias, Bernaud and Plunier (2014, pp. 345) define ***awareness gained from feedback received*** as 'an individual's perception that the feedback received has contributed to a better self-understanding in a professional context'. With regard to school inspections, teachers' awareness gained from inspection feedback can be understood as 'the perceptions of an individual teacher that the inspection feedback received has contributed to a better understanding of the different aspects of learning and teaching practices at school or teacher level'. According to Boudrias et al. (2013), changes in feedback acceptance and awareness gained from feedback are related, although there is no conditional or necessary association between them. In the context of a school inspection, this could mean that teachers' feedback acceptance does not necessarily lead an increased awareness if the content of the feedback is

already known. Conversely, feedback could also create a higher awareness, while teachers' acceptance of this feedback is lacking because they first want to check the information with other sources.

In their review, Penninckx and Vanhoof (2015) concluded that the extent to which schools gain new insights from inspection feedback is rather limited. Only in two of the reviewed studies, new topics were identified as priorities and were added to the school's development plan. New insights on school and classroom practices as a result of inspection (feedback) influence principals and teachers' intentions to respond to this feedback (Dedering & Müller, 2011; Ehren, 2010; McCrone et al., 2007), although it must be acknowledged that this assumption is not always confirmed. According to Landwehr (2011), inspectors tend to identify shortcomings that are already known to the school and its teachers, but by publishing them in an inspection report, they make these shortcomings official within and outside the school. Earlier research found that inspection feedback that confirms school leaders' and teachers' own insight into their strengths and weaknesses, does not always encourage to use the feedback received (McCrone et al., 2007).

In the above-mentioned studies, researchers use the term 'insights' to express the extent to which schools and teachers have gained new knowledge (experience, skills, …) through the receipt of inspection feedback. We believe that the use of this term is insufficient, since most often schools' and teachers' perceptions of that knowledge, rather than that knowledge itself, are described. We therefore advocate the use of the term 'awareness gained' when referring to schools and teachers' perceptions. Including teachers' awareness gained from the inspection feedback received in this dissertation is relevant to understand if the inspection feedback provides useful insights to the teachers and whether these insights contribute to teachers' willingness to use the feedback received.

### 1.6 The role of individual teacher characteristics in this research

Teachers' processing of inspection feedback and their willingness to use it can be influenced in many ways. To increase our understanding of teachers' subsequent reactions to inspection feedback, this dissertation will also examine the relationship between individual teacher characteristics and the way in which individuals process feedback and are willing to use it. Non-educational studies have shown that an individual's attitude toward feedback and their perception of themselves before they receive the feedback have a substantial influence on their thinking and behaviour in feedback use (Anseel & Lievens, 2006; Londen & Smither, 2002, 2005). More specifically, feedback utility, feedback self-efficacy, teacher self-efficacy and self-esteem

were found to be important in terms of feedback acceptance and use (Linderbaum & Levy, 2010; Keeping & Levy, 2000). To our knowledge, none of these characteristics have been studied in the context of teachers' acceptance of and willingness to use inspection feedback.

In this dissertation, feedback utility refers to teachers' perceived utility of feedback in general, while feedback self-efficacy refers to teachers' perceived competence to interpret and respond to feedback appropriately. Non-educational studies found that feedback utility and feedback self-efficacy influence feedback recipients' motivation to accept and use feedback (Brett & Atwater, 2001; Makiney & Levy, 1998; Steelman & Rutkowski, 2004). This has been substantiated in educational studies too. A small positive relationship between teachers' feedback utility and engagement in professional learning activities as a result of feedback was found in a study on teacher evaluation (Tuyens & Devos, 2011). Other studies in the field of data-use have shown that teachers' perceptions regarding their knowledge and skills around data use are important predictors for teachers' actual data use (Pierce & Chick, 2011).

Regarding teacher self-efficacy (teachers' perceptions of their ability to perform well as teachers) and self-esteem (the overall value that teachers place on themselves as a person), studies have found that individuals' reactions to feedback were determined by the degree of congruence between the feedback message and the self-perceptions of individuals before they received the feedback (Jussim, Yen, & Aiello, 1995; Nease et al., 1999). Kluger and DeNisi's review (1996) showed that individual differences in self-esteem are related to individuals' varied reactions to positive and negative feedback. The importance of differences in teacher self-efficacy was shown in the study of Zuber and Altrichter (2018) who examined the relationship between educational change and individual characteristics among Austrian primary school teachers. Their results indicated that self-efficacy fosters openness to educational standards reform which, in turn, increases the likelihood of teachers' participation in data use.

Although studies in educational and non-educational settings have found evidence for the relationship between individual teacher characteristics and the way in which individuals process feedback and are willing to use it, it remains unclear whether these characteristics play a part in teachers' reactions to inspection feedback. Therefore, this dissertation examine how differences in teachers' individual characteristics are related to (a) teachers' cognitive response, (b) teachers' feedback acceptance and awareness gained from the inspection feedback received, and (c) teachers' willingness to use the inspection feedback received.

The previous paragraphs have provided a broad introduction to the theoretical framework and variables for this dissertation. Based on the model by Ilgen et al. (1979), Figure 2 represents an overview of these variables and of our expectations regarding their interrelatedness. In summary, we expect that the interplay of cognitive responses and affective responses relates to teachers' acceptance of the inspection feedback received. In addition, we examine the relationship between feedback acceptance and teachers' willingness to use the inspection feedback received. The role of teachers' awareness gained from the inspection feedback received and individual teacher characteristics are also taken into account. These relationships will be examined across the studies included in this dissertation. Given the context-inclusive nature of this dissertation, the following section describes the school inspection process within the Flemish educational context.

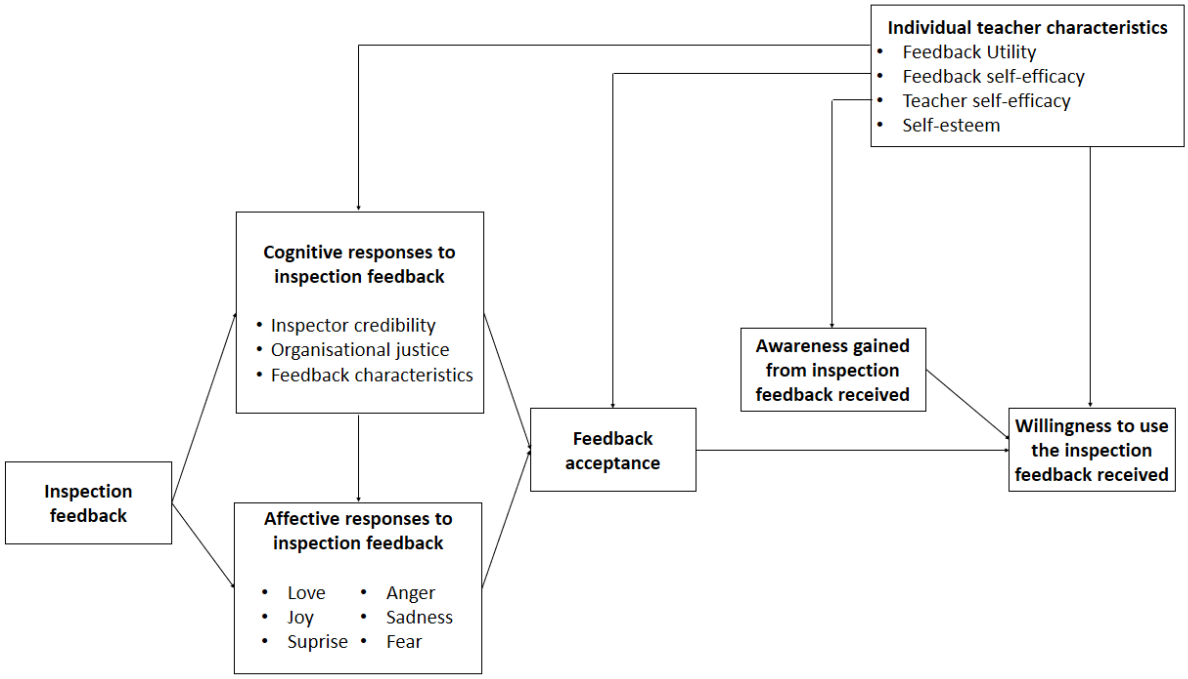


**Figure 2.** Overview of the variables in this dissertation

## 2. Context of the dissertation

This dissertation is conducted in Flanders, the Flemish speaking part of Belgium. The Flemish educational context is characterised by a large degree of school autonomy as schools develop their own curriculum, school work plan, teaching methods, and student assessments (OECD, 2013). Since there are no central examinations, formal external evaluation of Flemish subsidised schools is reserved only for the inspectorate, an independent body under the direct jurisdiction of the Minister of Education and Training of the Flemish Government. The Decree declaring the Quality of Education (2009) explicitly stipulates Flemish schools as primary bodies responsible

for the quality of the education they provide. Yet, the inspectorate evaluates whether the schools meet the legal requirements, such as attainment targets, development goals and safety and hygienic aspects of the school infrastructure.

In January 2018, the Flemish government implemented a new inspection system called 'Inspection 2.0'. Since the studies presented in this dissertation took place between April 2016 and March 2020, the transition from the old inspection system to Inspection 2.0 needed to be taken into account in our research planning. Whereas the first study is based on teachers' perceptions of the former inspection system, the data collection for the following three studies (study 2-4) was conducted under the new framework. Inspection 2.0 differs from its predecessor on a number of aspects. In the following subsections, the characteristics of the old inspection system are briefly described, followed by the changes that were implemented leading up to Inspection 2.0.

### 2.1 Before Inspection 2.0

Until January 2018, Flemish inspectors used the CIPO-model (CIPO is an acronym for context, input, process and output; Scheerens, 2006) as a guide for their school inspections. Each of the CIPO components —and their subcomponents — is assumed to have an impact on the educational quality. The inspection process contained three phases: (1) a preliminary enquiry, (2) an audit and (3) an inspection report (OECD, 2013).

The preliminary enquiry included, besides brief meetings with the school staff, a detailed analysis of the school's previous inspection reports and output data. When a school was visited during the audit phase, inspectors conducted lesson observations, analysis of school documents and interviews with members of the management and school staff. The data from these sources of information were collected throughout the inspection process, resulting in a profile of the school's strengths and weaknesses (OECD, 2013). Finally, the outcome of the audit phase lead to an advice about two independent topics, i.e. educational matters and school infrastructure. The inspectors wrote a report setting out the inspection findings, developed following a generic template for all levels of education and for all institutions. The report concluded with a final recommendation: either 'positive', 'positive restricted in time' or 'negative'. (OECD, 2013).

## 2.2 After 2018: Inspection 2.0

The reference framework for Quality in Education (2016), which took shape in the academic year 2015-2016, is the result of a partnership between the Flemish education providers and the Flemish Inspectorate of Education. Pupils, students, parents, school teams and other stakeholders were also intensively consulted. As this framework sets out expectations for high quality education, it is used in the new audit approach Inspection 2.0 that was launched in January 2018. Within this new approach, the Inspectorate examines the extent to which a school develops its own quality with regard to management and quality assurance of the teaching and learning practices once every six years. In addition, school inspectors examine the extent to which the education provided by the school, meets the quality expectations of the reference framework, and is in line with regulations (Flemish Inspectorate of Education, 2018). Apart from these accountability-oriented purposes, the Inspectorate additionally adopts a more stimulating role now, in order to engage in a development-oriented dialogue with teachers and school management.

In order to meet these objectives, the Inspectorate carries out four simultaneous enquiries during a school inspection procedure: (1) an examination of the school's quality development (school vision, organisation and educational policy, and quality management); (2) an examination of one or more quality areas, such as pupil guidance or the school's approach to diversity; (3) an inspection of teaching and learning practices (e.g. achievement of educational objectives as stipulated by the Flemish government), and (4) an inspection of the school's habitability, safety and hygiene (Flemish Inspectorate of Education, 2018).

At least 14 days before the inspection begins, the school leader receives an e-mail and is contacted by telephone. The first day of the inspection visit, inspectors hold an introductory meeting to inform the school leader and teachers on issues of importance and interest to the group. Since the fundamental tenet of Inspection 2.0 is the dialogue between inspectors and the school's stakeholders, during the first three or four days of the visit, inspectors speak extensively with the policy team and teaching staff, but also, as part of the new approach, with pupils, and parents. During these conversations, inspectors investigate the quality development of the school's policy, selected quality areas and teaching and learning practices (Flemish Inspectorate of Education, 2018).

Another change in the procedures of in Inspection 2.0 is situated more towards the end of the inspection visit. During the penultimate or the last day of the inspection visit, inspectors have

reflective discussions with the school's management team and teaching staff on whether the final outcome is positive or not. During these discussions, inspectors discuss their preliminary findings and give feedback on the school's strengths. They also discuss areas that need further improvement and potential actions, in order to meet the development-oriented purpose of a school inspection and to encourage the school to work on school improvement (Flemish Inspectorate of Education, 2018).

After these discussions, the inspectors make their final judgements and will ensure that the school leader understands how the inspection team has reached this judgement. The school receives the inspection report a few days after the inspection visit has been completed. This report is developed following a generic template for all levels of education and for all institutions, and the school's strengths and shortcomings are presented visually. At the end of the report, the inspection team's advice to the Government of Flanders on the further recognition of the school is stated. In order to support quality improvement, developmental opportunities are addressed too (Flemish Inspectorate of Education, 2018).

The final inspection judgement determines whether or not the school retains its recognition (accreditation). There are two possible inspection outcomes. When a school is judged to be good ('favourable opinion with our without major shortcomings'), it retains its recognition and the inspectors will visit the schools once every six years to confirm that the school remains good. If the inspectors judge the school inadequate ('unfavourable opinion'), the inspection team start the procedure for withdrawal of the recognition, although they give the school the possibility to improve their quality within a defined deadline – with or without assistance from the pedagogical advisory service of the umbrella organisation the school belongs to. The school will be visited after this time period, to examine whether the detected shortcomings have been improved (Flemish Inspectorate of Education, 2018).

Since the studies presented in this dissertation are the first to have been carried out within the new inspection system, this dissertation has also a descriptive purpose: it aims to provide a substantial overview of teachers' perceptions of Inspection 2.0, alongside a description of teachers' affective responses, and their acceptance and willingness to use the inspection feedback.

## 3. Research aims, research design and outline of the dissertation

Insights into teachers' cognitive and affective responses regarding school inspection feedback and the relationship of these responses with teachers' acceptance of and willingness to use this

feedback are limited. The general aim of this dissertation is to address this research gap. To this end, two overarching research questions are proposed within this dissertation:

*RQ 1. Which cognitive and affective responses do teachers experience with regard to school inspection feedback?*

*RQ 2. How does the interplay of teachers' cognitive responses and affective responses shape teachers' feedback acceptance and their willingness to use inspection feedback?*

The following paragraphs further elaborate on the conceptual framework in terms of the different studies conducted in this dissertation for answering the general research questions. An overview of how these studies are related, is presented in Figure 3.

With regard to the first research question, the dissertation aims to obtain a deeper understanding of which cognitive and affective responses are experienced by teachers with regard to the inspection feedback received. Through the identified research gaps outlined, this dissertation aims at expanding and refining knowledge on teachers' responses in the context of inspection feedback. Therefore, the first part of this dissertation is built around the following explorative studies:

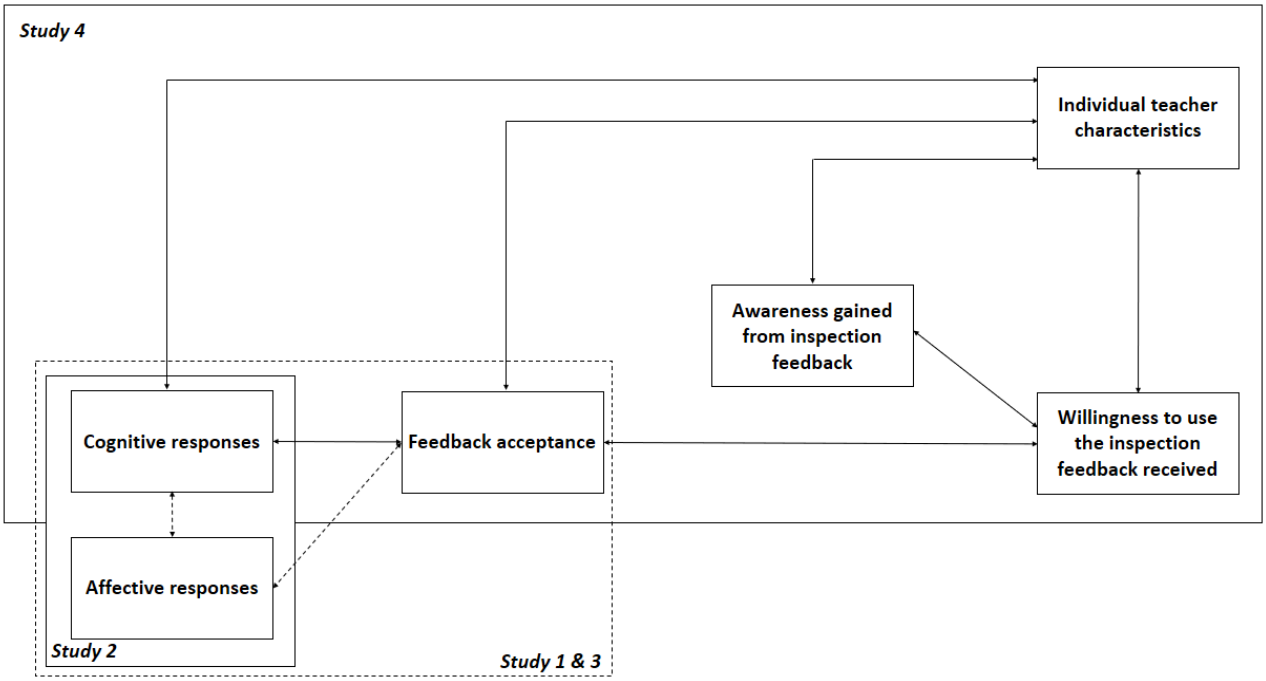


**Figure 3.** Schematic overview of the studies

***Study 1: Understanding the influence of teachers' cognitive and affective responses upon school inspection feedback acceptance***

While feedback is considered valuable for improving teachers' performance (e.g. Cheetham & Chivers, 2005; Colvin et al., 2009), it remains unclear whether teachers receive feedback that is relevant to them during a school inspection visit, since most inspectorates are required by law to provide feedback at the school level. Therefore, the first research aim of this study is to describe the sources of feedback that teachers in schools report as beneficial and helpful for their professional development during the inspection visit. In the second part of this study, we aim to get insight into teachers' cognitive and affective responses when accepting or rejecting inspection feedback. More specifically, these main research objectives lead to the following research questions:

- *What are the sources of feedback that teachers report during a school inspection process?*

- *Which cognitive responses to feedback do teachers report during a school inspection process? Which influence do these responses have upon the acceptance of school inspection feedback?*

- *Which affective responses to feedback do teachers report during a school inspection process? Which influence do these responses have upon the acceptance of school inspection feedback?*

According to Cresswell (2017), a qualitative approach is appropriate when a researcher wants to explore and understand individuals' experiences and their perceptions. Using in-depth qualitative interviews with primary school teachers, teachers' cognitive and affective responses regarding the inspection feedback are identified.

Since study 1 is based on a limited sample, this small sample size provides limited potential for generalisation of the results. Therefore, teachers' cognitive and affective responses that were revealed in study 1 required further testing and refinement in a larger sample of teachers. As no instruments were available to capture the full array of teachers' affective and cognitive responses during a school inspection visit, a survey instrument with both closed-ended and open-ended questions was developed in order to test the qualitative results against a larger sample of teachers in primary schools that had recently been inspected.

***Study 2: A full array of emotions: An exploratory mixed methods study of teachers' emotions during a school inspection visit***

By adopting a convergent mixed methods design (Creswell & Clark, 2017), ***study 2*** focusses primarily on a quantitative description of the presence and the perceived intensity of teachers' emotions during the school inspection visit with regard to three moments at which teachers have the occasion to receive feedback on their or the school's performance. In addition, the interplay between teachers' emotions and their cognitive responses is further investigated by incorporating a qualitative analysis. This study addresses the following research questions:

- *What is the intensity of teachers' emotions with regard to (1) the introductory meeting, (2) their conversation with the inspectors and (3) the final inspection outcome?*

- *Which cognitive responses are reported by teachers regarding the inspection visit?*

Multilevel analysis is used to interpret and compare the emotions of teachers in primary schools, while the analysis of the open-ended questions adds contextual information to the quantitative measurements by describing teachers' cognitive responses in schools where the highest levels of emotions are measured for each emotion. The quantitative findings contribute to the research field as they give insight into the full array of affective responses that teachers experience during a school inspection visit, while the use of qualitative research to follow up the quantitative findings helps to understand the quantitative results.

The second part of this dissertation builds on the insights gained from the first part and aims to increase our understanding of how the interplay of teachers' cognitive responses and affective responses shapes teachers' feedback acceptance and willingness to use inspection feedback (research question 2). A large-scale quantitative analysis forms the basis for the explanatory studies that investigate these relationships. Because the purpose of this part was to examine the relationships between a selection of variables, a quantitative approach was the most appropriate choice (Cresswell, 2017). Two studies comprise the second part of this dissertation:

***Study 3: Determinants of teachers' feedback acceptance during a school inspection visit***

Whereas the first part of this dissertation provides insight into teachers' cognitive and affective responses regarding a school inspection visit, study 3 focuses on the existence and

strength of relationships between these responses and teachers' feedback acceptance. Starting from appraisal theory, the study concentrates on cognitive responses as antecedents of emotions and hypothesises that teachers' affective responses mediate the relationship between teachers' cognitive responses and feedback acceptance. These aims have resulted in the following research questions:

- *How are teachers' affective responses related to their cognitive responses in the context of a school inspection?*

- *Do these affective responses mediate the relationship between teachers' cognitive responses and their feedback acceptance?*

To this end, a path analysis, using Structural Equation Modeling (SEM) was conducted to test the hypothesised relationships. As this study is the first to explore how teachers' cognitive and affective responses are related to feedback acceptance in an inspection context, new insights are generated whereupon not only future research, but also school inspectors can build.

***Study 4: The role of feedback acceptance and gaining awareness on teachers' willingness to use inspection feedback***

In ***study 4***, the data from study 3 are revisited in order to investigate the relationship between teachers' feedback acceptance and teachers' willingness to use inspection feedback. By means of SEM, we build a research model that focuses on the relationship between cognitive responses, teachers' feedback acceptance, awareness gained from the inspection feedback received, and teachers' willingness to use inspection feedback. To enrich the theoretical framework, we included the relationship between teachers' awareness gained from the inspection feedback received and their willingness to use the feedback. In addition, the relationship between individual teacher characteristics and the different components in the research model were also taken into account. More specifically, the following research questions are put forward:

- *To what extent are teachers willing to use the inspection feedback received?*

- *To what extent are differences between teachers' willingness to use the inspection feedback received related to teachers' feedback acceptance, teachers' awareness gained*

*from the inspection feedback received, and their antecedents (teachers' cognitive responses)?*

- *How are differences in teachers' individual characteristics related to (a) teachers' cognitive response, (b) teachers' feedback acceptance and awareness gained from the* inspection feedback received, and (c) teachers' willingness to use the inspection feedback received?

Future research can build upon these results as this study is the first to explore the relationship between feedback acceptance, awareness gained from the feedback received and teachers' willingness to use this feedback. Furthermore, the results enable school inspectors to become aware of how their perceived behaviour and the feedback provided to teachers interacts with teachers' subsequent reactions to the feedback.

From a methodological viewpoint, this dissertation strives to achieve a balance between in-depth research and generalizability (see Table 2). In study 1, qualitative research is used to gain an understanding of teachers' cognitive and affective responses, and to develop hypotheses for the subsequent studies. Using a mixed methods design in study 2, approaches that aim to generalise findings (i.e. closed-ended questions) are used to inform further in-depth methods of investigation (i.e. open-ended questions). Finally, quantitative research is used to quantify our defined variables, uncover relations in our research data – and to generalise results from a larger sample population in studies 3 and 4.

**Table 2.** Overview of the respondents and methodologies used for the different research goals

| | **Respondents** | **Quantitative research** | **Qualitative research** | **Before Inspection 2.0** | **Inspection 2.0** |
|---|---|---|---|---|---|
| **Study 1** | 21 teachers | | X | X | |
| **Study 2** | 316 teachers | X | X | | X |
| **Study 3** | 687 teachers | X | | | X |
| **Study 4** | 687 teachers | X | | | X |

The four studies are presented in separate chapters. Each chapter is based on a paper that has been published in or submitted to an academic journal. A consequence of this approach is that each of these chapters is a separate unit to be read on its own. Some overlap between chapters exists as each chapter has its own introduction, conceptual framework, method section, results section, discussion and conclusion, and limitations. The final chapter of this dissertation summarises the main findings of the different studies and discusses this dissertation's general

findings. In addition, we discuss the limitations of the chosen approach, suggestions for future research, and the implications for educational practice.

**Note**

Each chapter is based on a published or submitted paper in an academic journal. A drawback of this approach is that each of these chapters is a separate unit to be read on its own. Some overlap between chapters exists as each chapter has its own introduction, conceptual framework, method section, results section, discussion and conclusion, and limitations.

# STUDY 1

# *Understanding the Influence of Teachers' Cognitive and Affective Responses upon School Inspection Feedback Acceptance*

**THIS CHAPTER IS BASED ON**

*Quintelier, A., Vanhoof, J., & De Maeyer, S. (2018). Understanding the influence of teachers' cognitive and affective responses upon school inspection feedback acceptance. Educational Assessment Evaluation and Accountability, 30(4), 399–431. doi.org/10.1007/s11092-018-9286-4.*

**ABSTRACT** *Despite the developmental perspective of school inspections, teachers in inspected schools are not always willing to accept the school inspection's feedback for their further improvement of teaching and learning processes. Literature distinguishes several aspects of feedback that stimulate or hinder the acceptance of feedback, such as recipient's cognitive and affective responses to feedback. This study investigates teachers' cognitive and affective responses to school inspection feedback in relation to feedback acceptance. It draws on data from 21 in-depth interviews with teachers in eight primary schools. We found that positive perceptions of the inspectors' credibility enhance teachers' feedback acceptance. This is also the case for positive, clear feedback. Under these circumstances, emotions of joy, happiness and relief are expressed. Conversely, respondents tend to reject feedback when inspectors are perceived to be inadequately informed, arrogant or disrespectful. When negative feedback is rated as unfair, negative emotions, such as anger and sadness, interfere with feedback acceptance. In essence, we conclude that both feedback content and feedback source characteristics are decisive in the acceptance of process. From a practical perspective, the findings suggest there is a need to build on supportive relationships between teachers and school inspectors.*

## 1. Introduction

School evaluation can have two purposes, accountability and improvement. While the first perspective is primarily about providing a guarantee of compliance to legislation and administrative regulations, proponents of the second perspective view an inspection as a lever for improvement of educational quality (Ehren et al., 2013). The school inspection stimulates this improvement through providing feedback—information on the school's strengths and weaknesses—in accordance with a set of preconceived standards (Ehren, 2016). Schools are supposed to accept this feedback and to implement actions in order to eliminate deficits (Coe, 2002). Apart from school improvement, some authors associate school inspections with the intended outcome of changing the behaviour of teachers as the inspectorate provides feedback to develop teachers with the ability to deliver high-quality teaching as well (Ehren et al., 2013; Nelson & Ehren, 2014). Despite these expectations regarding school inspections' formative functions, research on feedback in general demonstrates that feedback very often does not have this intended effect (Kluger & DeNisi, 1996).

Although it is widely accepted that providing teachers with individual feedback is valuable to improve their academic and social-behavioural performance (e.g. Cheetham & Chivers, 2005; Colvin et al., 2009), it remains unclear whether teachers receive this kind of feedback during a school inspection process. While school inspections can be targeted at teacher level, in some areas, the inspection focuses particularly on the school as a whole, taking into account the interactions between the school board, teachers, parents and pupils (Ehren, 2016). Especially in the latter case, teachers denounce the lack of clear, concrete feedback about their teaching quality in inspection reports, which leaves them inadequately informed to initiate and implement improvement actions (e.g. Chapman, 2002; Plowright, 2007). Therefore, the first goal of this study is to describe the sources of feedback that teachers report as beneficial, fair and helpful for their development during the school inspection process.

Secondly, the fundamental transfer of feedback does not consist solely of sending and receiving the message, as recipients' cognitive responses to feedback are crucial in the feedback acceptance process. These perceptions (or thoughts) about the credibility, fairness and characteristics of respectively feedback source, feedback process and feedback content have been widely discussed as significant factors for feedback acceptance in organisational psychology (e.g. Brett & Atwater, 2001; Greller & Herold, 1975; Ilgen et al., 1979; Leung et al., 2001). For example, feedback literature considers sign (positive or negative feedback) to be one of the key characteristics of feedback acceptance as individuals are generally more likely to accept positive feedback (e.g. Baron, 1993). However, prior school inspection research indicates that an open and connected dialogue between inspectors and teachers encourages the acceptance of unfavourable feedback (Ehren & Visscher, 2008; Erdem & Yaprak, 2013). While in most educational research, teachers' and principals' cognitive responses are being narrowed to their perceptions of school inspectors' credibility, studies upon feedback fairness and feedback content are rather scarce. So, if we want to broaden our understanding of teachers' feedback acceptance during school inspection processes, it is important to investigate the overall picture of teachers' cognitive responses and their impact upon feedback acceptance.

Feedback does not only elicit cognitive reactions, it also enhances affective responses to feedback. Furthermore, feedback research in general shows that these responses can interfere with feedback acceptance as well (e.g. Brett & Atwater, 2001; Kluger & DeNisi, 1996; Sargeant et al., 2008). Affective responses to feedback refer to how the feedback makes a recipient feel (Chen et al., 2017). In educational research on school inspection, it is generally accepted that school inspection visits bring with them unintended negative consequences, such as an emotional

impact on the school staff (e.g. Ehren et al., 2013; Gray & Gardner, 1999; Penninckx & Vanhoof, 2015; Perryman, 2006, 2007, 2009; Quintelier et al., 2016; Scanlon, 1999; Sutton & Wheatley, 2003). On a positive note, McCrone et al. (2007) and Scanlon (1999) stated that the inspection can give teachers a moral boost if they are left with a feeling of being appreciated by the success of pupils and with pride about their own share in this result. Positive emotions, such as relief, satisfaction and pride, related to the inspection may be a powerful source for teachers' motivation, resilience, perseverance and job satisfaction (Gu & Day, 2007; Ofsted, 2007). Negative emotions, such as anxiety, anger, depression and guilt, are reported when teachers' ideas and practices are being questioned (Jeffrey & Woods, 1996; Kelchtermans & Deketelaere, 2016). Scanlon (1999) observed the existence of negative emotions in schools with a negative judgment and concluded that a special measures regime, due to the negative advice, caused extreme stress and anxiety. Non-educational research points to the importance of the relationship between feedback sign and affective responses in the feedback acceptance process. Positive feedback will generally lead to positive emotions, while negative feedback, inconsistent with respondents' self-perceptions, appears to elicit negative emotional responses, such as anger and sadness. The presence of these negative emotions can obstruct the acceptance of feedback (Anseel et al., 2011; Brett & Atwater, 2001; Hattie & Timperley, 2007; Kluger & DeNisi, 1996). Additionally, perceptions of feedback (un) fairness tend to be emotionally charged as well (Cohen-Charash & Spector, 2001; Sargeant et al., 2008). For example, anger may be elicited by the appraisal of being treated unfairly (Lazarus, 1991). Interestingly, the influence of teachers' affective responses to feedback with regard to feedback acceptance in school inspection processes is relatively unexplored.

Given their importance to achieve teachers' professional learning and development, further research is needed to understand which responses lead to feedback acceptance and rejection during a school inspection process. Therefore, this study aims to identify teachers' cognitive and affective responses to feedback during a school inspection process and their influence upon the feedback acceptance process. The following set of research questions (RQ) is set forward:

- *RQ 1. What are the sources of feedback that teachers report during a school inspection process?*

- *RQ 2. Which cognitive responses to feedback do teachers report during a school inspection process? Which influence do these responses have upon the acceptance of school inspection feedback?*

- *RQ 3. Which affective responses to feedback do teachers report during a school inspection process? Which influence do these responses have upon the acceptance of school inspection feedback?*

## 2. Conceptual framework

In this section, we will explore in more detail the concepts presented in the introduction. In Figure 1, the outline of the conceptual framework for this study is visualised. We conceptualise feedback and distinguish the different sources of feedback that teachers can refer to within the context of a school inspection. Next, we provide an overview of the existing literature on cognitive responses to feedback. In this study, we categorise teachers' perceptions regarding the source's credibility, feedback fairness and feedback characteristics as cognitive responses. In line with Parrott's classification of emotions (2001), joy, love, surprise, anger, sadness and fear is used to describe teachers' affective responses to feedback. As we will show, these affective responses can have a mediating role in the feedback acceptance process. Both concepts are expected to influence the acceptance of feedback.

### 2.1 Conceptualisation of feedback (acceptance)

In order to conceptualise 'school inspection feedback', we have adopted the definition of Kluger and DeNisi (1996, p. 235), who define 'feedback' as 'actions taken by an external agent to provide information regarding some aspect(s) of one's task performance'. Although literature distinguishes different sources of feedback, such as organisations, supervisors, co-workers, the task environment and the self (e.g. Greller & Herold, 1975; Hattie & Timperley, 2007; Ilgen et al., 1979), the definition of Kluger and DeNisi (1996) excludes self-generated feedback. Although self-assessment is considered as an effective tool which helps teachers to improve their performance, research indicates that self-perception differs from how the performance is viewed by others as individuals have blind spots about their abilities that prevent them from reaching the next stage of professional development (Dunning et al., 2003). Just like Kluger and DeNisi (1996) put the emphasis of feedback on task performance, OECD (2013) limits teacher feedback to information that teachers receive about their teaching (p. 130). Often, performance feedback is defined in terms of an evaluation of a certain task measured against preconceived standards to communicate to individuals about their current level of behaviour (e.g. Noell et al., 2005). This is in contrast to other researchers, who suggest that performance is more than the ability of teaching alone and who refer to non-academic outcomes of education as well (e.g. Visscher & Coe, 2003).

Therefore, in this study, performance includes the recipient's cognition, motivation, behaviour and even the attitudes about the task as well (Duijnhouwer et al., 2012; Hattie & Timperley, 2007; Shute, 2008). Multiple studies suggest that individuals' acceptance of feedback is critical to the overall success of performance management and its effectiveness for further development, because attitudes have a powerful influence on behaviour (Kim & Holzer, 2014). However, accepting feedback from inspectors does not necessarily lead to school improvement actions (Ehren et al., 2013; Ehren & Visscher, 2008). Ilgen et al. (1979) make a clear distinction between the acceptance of feedback and the desire to respond to feedback. While feedback acceptance refers to the recipient's belief that the feedback is an accurate portrayal of his or her performance, the willingness to respond to feedback is depending on many other factors, such as the timing, the source's power and the feedback's incentive. In this study, we have opted to solely examine the acceptance of feedback, since feedback must be accepted before it can be used (Ashford, Blatt, & Walle, 2003).

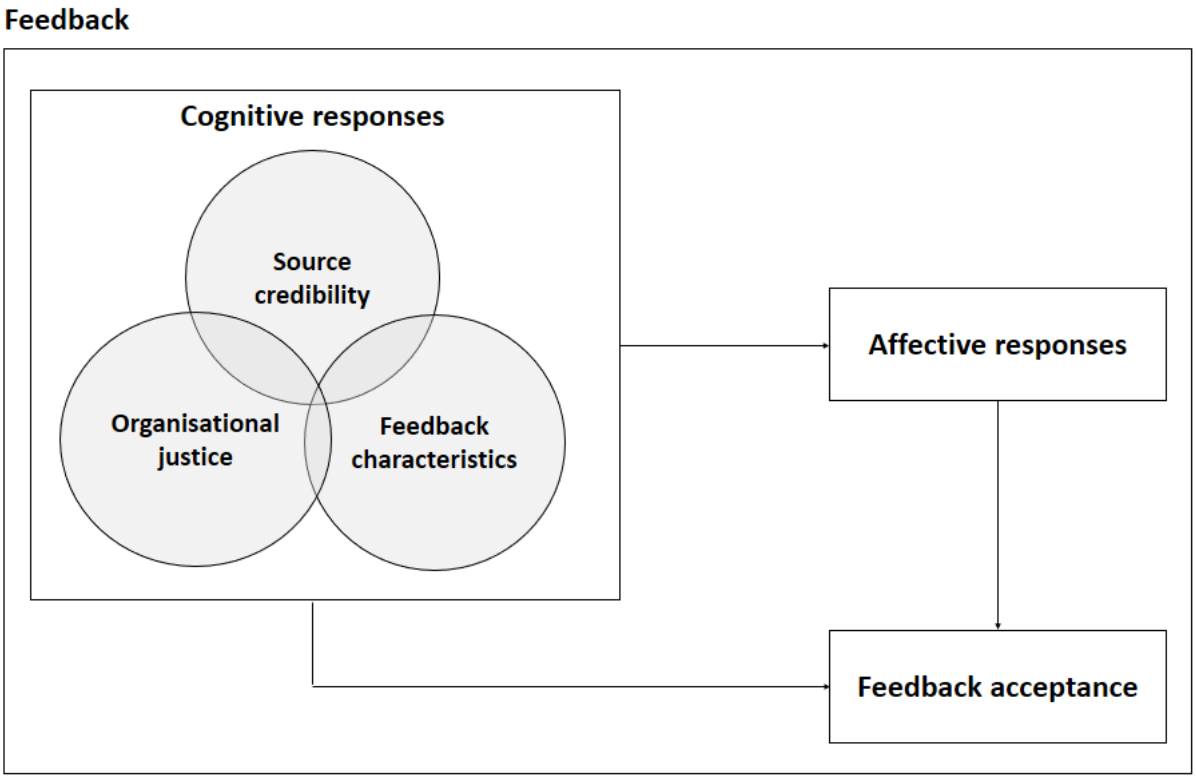


**Figure 1.** Conceptual model for feedback in school inspection processes

### 2.2 Teachers' feedback sources

Providing teachers with feedback on their teaching on a regular basis can significantly improve teaching practices (Santiago & Benavides, 2009; Hattie, 2008). Educational research distinguish

teachers' feedback from principals, mentors, colleagues, students and parents (e.g. Garza, 2009). Teacher evaluation is common across OECD countries, and school inspections have an important role in demonstrating good practices, although in some countries, the inspectorate cannot take responsibility for individual teacher evaluations as this is seen as a task of school boards (OECD, 2013). Sometimes, these inspectors have no legal rights to give any advice to schools and teachers on how they can improve their current practices (Penninckx et al., 2014). Their inspection framework controls schools and only holds them accountable in 'a transparent and comparable manner' (Ehren, 2016, p. 13). Instead, in other contexts, these school inspections have a stimulating role in the school's quality development processes. For this reason, the inspection report can only contain feedback at school level. However, studies indicate that among teachers, there is a need to seek advice from school inspectors after lesson observation. When school inspectors provide feedback or suggestions for improvement of their classroom practice, teachers can feel appreciated and recognised. Conversely, when this feedback was not provided, the uncertainty and self-doubt of teachers can increase (Kelchtermans & Vandenberghe, 1998). Recent research indicates that school inspectors sometimes provide a number of practical tips off the record, to strengthen the classroom practice directly to teachers (Penninckx et al., 2014; Dobbelaer, Godfrey, & Franssen, 2017). Nevertheless, the extent to which teachers receive feedback from various sources, formal and informal, during a school inspection process and make use of this feedback is not explored yet.

## 2.3 Cognitive responses

Cognitive responses to feedback are defined as the recipient's perceptions (or thoughts) about the credibility of the source, fairness of the feedback and the features of feedback information (e.g. Ilgen et al., 1979; Brinko, 1993).

### 2.3.1 Credibility of the feedback source

People are more likely to accept feedback when the source of this information is perceived as credible (e.g. Audia & Locke, 2004; Ilgen et al., 1979; Gray et al., 1999). According to Brinko (1993), credibility has two key components: expertise and trustworthiness.

Expertise (or knowledge) refers to the degree to which a feedback source is perceived to be capable of making accurate assertions. In order to deliver high-quality feedback, a school inspector requires abilities to identify areas for improvement in teachers' practices and to indicate the specific changes needed to achieve this improvement (Brimblecombe, Ormston, & Shaw, 1995). In his study of 48 teachers and head teachers, Dean (1995) found that teachers in

primary schools are often reluctant to accept feedback from inspectors with a secondary background. In addition, a more HR-related study by Geddes and Linnehan (1996) points to the extent to which a feedback source is aware of the circumstances under which the recipient performs the job. Respondents in this study were more likely to accept feedback when the feedback provider reflected a good understanding of their work conditions.

Besides the ability to provide good feedback, many authors stress also the importance of the trustworthiness of the source in relation to the degree of feedback acceptance (Brinko, 1993; Ilgen et al., 1979). Trustworthiness represents the degree to which an individual trusts the feedback source's intentions and motives, free from biasing factors, at the time of feedback (Kinicki et al., 2004; Steelman & Rutkowski, 2004). Although almost every teachers experience fear and anxiety in advance of a school inspection, these emotions decrease when inspectors are perceived as professional, collegial and nonthreatening (McNamara & O'Hara, 2006). The perception of the school inspectors' trustworthiness affects the teacher's motivation and receptiveness to accept inspection feedback (Erdem & Yaprak, 2013). While an authoritarian attitude triggers reactions of resistance and rejection towards the inspectors, a more open and connected dialogue between both parties improves teachers' receptiveness to feedback (Kelchtermans, 2007; Leeuw, 2002; Ouston, Fidler, & Earley, 1997). Dobbelaer et al. (2017) points to the importance of inspector training on communication skills to enhance teachers' acceptance of unfavourable inspection results. Finally, a positive relationship between school inspectors and teachers results in more acceptance of the feedback, and more favourable reactions towards the report and an increased willingness to use it as a start for further improvement (Ehren & Visscher, 2008; Kogan & Maden, 1999).

### 2.3.2 Fairness perceptions of feedback

If school inspections attempt to drive quality improvements in schools, then it is essential that the inspection procedure and the inspection report are acknowledged by the school staff as a valid and reliable evaluation of the school's efforts and achievement as this increases the staff's willingness to accept the recommendations in the report (Kelchtermans, 2007, p. 484). Moreover, feelings of distrust in organisations can not only influence individuals' attitudes and behaviour towards the organisation, such as theft, vandalism or resistance, but they can also form the basis for (psychological) withdrawal and quitting intentions (e.g. Jermier, Knights, & Nord, 1994; Nadiri & Tanova, 2010). The term 'organisational justice' refers to the extent to which individuals perceive evaluation outcomes, processes and interactions to be fair (Cropanzano & Greenberg, 1997). Literature distinguishes three types of organisational justice: distributive,

procedural and interactional justice (e.g. Colquitt, 2001). There have, to our knowledge, been no studies to date of the effects of organisational justice in school inspection context on teachers' acceptance of feedback.

Distributive justice is related to the fairness of outcomes (or consequences of the decisions). Assessing outcome fairness concerns whether the level and type of information is perceived as fair by comparing their feedback to those of others, whereby individuals compare whether the ratio of their contributions and outcomes (or rewards) is similar to that of their peers (Colquitt, 2001). This was substantiated by Leung et al. (2001) who show that recipients are more readily to accept negative feedback when they perceive the feedback to be correct.

Procedural justice relates to the fairness of the decision process in which information was gathered to determine the outcomes (Colquitt, 2001). When individuals perceive these procedures as transparent and bias-free, the feedback will be more likely accepted (Nojani et al., 2012). When individuals have the opportunity to express their concerns before decisions are made, their perceptions of procedural justice increase. In a study of Thomas (1996), teachers report a sense of injustice when the dialogue with school inspectors is lacking. A more recent study of Gustafsson et al. (2015) indicates a higher level of feedback acceptance when school inspectors set clear expectations regarding the quality of education.

Interactional justice can be defined as the recipients' perceptions of the fairness and quality of the interpersonal treatment they receive from the feedback source (Colquitt, 2001). A review of Tyler and Bies (1990) indicates that perceptions of fairness are sensitive to interactions between the feedback source and recipient. When treated with respect, respondents mentioned less bias and were more likely to respond to the received feedback. As this latter dimension involves perceptions of the interaction and attitudes of the feedback source, such as demonstrating respect and dignity towards the feedback recipient (Colquitt, 2001), it is, in this study, associated with the credibility of the source (see Section 2.3.1).

### 2.3.3 Characteristics of feedback content

Sign, constructiveness, clarity, relevance and specificity are defining characteristics of feedback (e.g. Geddes & Linnehan, 1996; Ilgen et al., 1979; Kluger & Denisi, 1996). Ilgen et al. (1979) indicate the importance of the sign of the feedback as key characteristic for feedback acceptance.

Ilgen et al. (1979) indicate the importance of the sign of the feedback—that is, whether the feedback signals success or failure—as key characteristic for feedback acceptance, as he states

that 'almost without exception positive feedback is accepted more than negative' (p. 357). Positive feedback is not only seen as more accurate than negative feedback (Ilgen & Hamstra, 1972); individuals are also more likely to accept positive feedback from any source as it enhances one's self-image (Brinko, 1993; Kluger & DeNisi, 1996; Van-Dijk & Kluger, 2004). In the case of negative feedback, feedback acceptation increases when the source is perceived as credible (Ilgen et al., 1979; Kluger & DeNisi, 1996).

With regard to feedback constructiveness and clarity, research emphasises the importance of clear and explicit feedback (Matthews & Sammons, 2004). Teachers prefer constructive, practical feedback. Constructive feedback includes feed forward (e.g. improvement suggestions for remedying poor performance) and must be given in a directive sense, with regard to strengths and limitations (Hattie & Timperley, 2007; Ehren & Visscher, 2008). Despite the evidence that accurate and straightforward feedback regarding the recipient's performance increases the willingness to respond to the message (Ilgen et al., 1979), many inspectorates are not allowed to give this kind of information to schools and teachers (Francis, 2011; McCrone et al., 2007; Penninckx et al., 2014).

Finally, teachers accept feedback more easily and are more likely to change their behaviour, when the content is relevant to them and consistent with their goals and expectations (Dobbelaer et al., 2017; Fidler et al., 1998). This is substantiated by other empirical research that indicate that negative feedback is better accepted when the recipients' self-image or self-perceptions are consistent with or even lower than the received information. Conversely, recipients who agreed with their feedback saw it as generally consistent with or higher than their self-perceptions (e.g. Jussim et al., 1995; Sargeant et al., 2008).

## 2.4 Affective responses

### 2.4.1 Conceptualisation and classification of teachers' emotions

Feedback does not only elicit cognitive responses, it also evokes emotional reactions. In literature, the conceptualisation of emotions remains often elusive as authors may assume there is a general consensus about the content of this concept (Gendron & Feldman Barrett, 2009; Scherer, 2005; Sheppard et al., 2015). Yet, this perception is not reflected in research (Sheppard et al., 2015), because scholars use a definition of emotion that reflects the theoretical viewpoints including affective, cognitive, physiological, disruptive, adaptive and motivational definitions (Sander, 2013). As a result of this variety of interpretations, a lot of researchers advocated the

need for a conceptual framework and a common vocabulary in order to discuss and analyse emotion research (e.g. Linnenbrink-Garcia & Pekrun, 2011; Meyer & Turner, 2006).

One definition delineates emotions as 'brief, rapid responses involving physiological, experiential, and behavioural activity that helps humans respond to survival-related problems and opportunities' (Keltner & Ekman, 2003, p. 163). More recently, Sander (2013) compared and integrated different theories and models on emotions and distinguished similar characteristics (e.g. multiple components, brief duration, rapid changeable), but focused on the importance of appraisal as the cognitive antecedent of emotion. This perspective, originally introduced by cognitive psychological theoreticians (Frijda, 1993; Lazarus, 1991), emphasises that individuals evaluate whether a certain situation is relevant to their needs or well-being and whether this situation is consistent with their goals.

Researchers point to the existence of strong relations between these appraisals and specific emotions (e.g. Frijda, 1993; Lazarus, 1991; Scherer, 2005; Turner & Schallert, 2001), whereby these emotions occur as a response to this evaluation of the event, rather than to the event itself (Roseman & Smith, 2001; Smith & Lazarus, 1990). Therefore, different perceptions of events cause different appraisals and thus different emotions in individual people (Frijda, Kuipers, & Ter Schure, 1989; Sutton & Wheatley, 2003).

Most literature about teachers' emotions distinguishes positive and negative emotions (e.g. Sander, 2013; Sutton & Wheatley, 2003). Positive emotions refer to emotions that evoke when an individual is making progress towards a goal, such as happiness, pride, relief, hope, satisfaction and excitement. Negative emotions arise from goal incongruence and include anger, anxiety, fright, guilt, sadness, envy, jealousy, disgust and sadness (Hargreaves, 1998; Lazarus, 1991; Sutton & Wheatley, 2003). Another classification of emotions, however, is of the hand of Parrott (2001) who follows the perspective where basic emotions are further divided into non-basic secondary and tertiary emotions. Parrott identified more than a hundred emotions grouped within six primary emotions: love, joy, surprise, anger, sadness and fear (see Table 1). The secondary division contains more emotions within each primary emotion group. Table 1 shows also the third level, an extension of the branches from the secondary emotion group. This tree structure of emotions will provide a framework to analyse the emotions of teachers in this study, as it gives a comprehensive overview of human emotions and provides an insightful awareness of how emotions are interrelated at different levels (Chen, 2016).

**Table 1.** Parrott's emotions by group

| Primary emotion | Secondary emotion | Tertiary emotion |
|---|---|---|
| **Love** | Affection | Adoration, Fondness, Liking, Attractiveness, Caring, Tenderness, Compassion, Sentimentality |
| | Lust | Arousal, Desire, Passion, Infatuation |
| | Longing | Longing |
| **Joy** | Cheerfulness | Amusement, Bliss, Gaiety, Glee, Jolliness, Joviality, Joy, Delight, Enjoyment, Gladness, Happiness, Jubilation, Elation, Satisfaction, Ecstasy, Euphoria |
| | Zest | Enthusiasm, Zeal, Excitement, Thrill, Exhilaration |
| | Contentment | Pleasure |
| | Pride | Triumph |
| | Optimism | Eagerness, Hope |
| | Enthrallment | Enthrallment, Rapture |
| | Relief | Relief |
| **Surprise** | Surprise | Amazement, Astonishment |
| **Anger** | Irritation | Aggravation, Agitation, Annoyance, Grouchy, Grumpy, Crosspatch |
| | Exasperation | Frustration |
| | Rage | Anger, Outrage, Fury, Wrath, Hostility, Ferocity, Bitter, Hatred, Scorn, Spite, Vengefulness, Dislike, Resentment |
| | Disgust | Revulsion, Contempt, Loathing |
| | Envy | Jealousy |
| | Torment | Torment |
| **Sadness** | Suffering | Agony, Anguish, Hurt |
| | Sadness | Depression, Despair, Gloom, Glumness, Unhappy, Grief, Sorrow, Woe, Misery, Melancholy' |
| | Disappointment | Dismay, Displeasure |
| | Shame | Guilt, Regret, Remorse |
| | Neglect | Alienation, Defeatism, Dejection, Embarrassment, Homesickness, Humiliation, Insecurity, Insult, Isolation, Loneliness, Rejection |
| **Fear** | Horror | Pity, Sympathy |
| | Nervousness | Alarm, Shock, Fear, Fright, Horror, Terror, Panic, Hysteria, Mortification |

*Source: Parrott (2001)*

### 2.4.2 Teachers' affective responses to school inspections

Teachers' efforts to address the (perceived) inspection expectations are found to go together with the experience of intense emotions (Hargreaves, 1998; Perryman, 2007). In a recent review study of Penninckx and Vanhoof (2015), 28 out of the 35 studies (80%) provided data on the emotions caused by inspection. Although evidence of negative emotions amongst school staff as

a result of school inspections were found in each of these studies, only 16 studies were the result of teachers' personal experience of emotional effects.

The notification period is generally considered to be a very stressful period (Brimblecombe & Ormston, 1995), although other studies also found severe emotional effects during or after the inspection (Penninckx & Vanhoof, 2015; Perryman, 2007). During inspection, teachers say they feel stress and uneased when the inspector carries out lesson observations (Macbeath, 2008; Varnava & Koutsoulis, 2006). This was substantiated by Wilcox and Gray (1996) who found that teacher anxiety is related with being observed teaching. According to Perryman (2006), teachers feel that way in any form of evaluation because they feel like they have to perform to demonstrate their competences. Macbeath (2008) points to the support of the director as a decisive factor in the level of teachers' stress experience. Teachers in the study of Hopkins et al. (2016) experienced stress because there is so much depending on the results of the inspection. With regard to the inspection outcome, several studies have provided evidence that teachers felt depressed, ashamed, traumatised and even shocked when the school received a negative judgment (Thomas et al., 2000; Wilcox & Gray, 1995). When teachers find themselves under intense pressure as the result of special measures, intense emotions such as anxiety, frustration and anger were found (Nicolaidou & Ainscow, 2005). Jeffrey and Woods (1996) conclude that teachers experience these strong negative emotions when their conceptualisations of well-nourished ideas and practices are being questioned. Discrepancies between teachers' actual performance and school inspectors' desired goals generally result in negative emotions (Brunsden et al., 2006; Scanlon, 1999). Despite the above-mentioned studies where stress was reported in schools with a negative outcome, Brunsden et al. (2006) found that even in schools with a positive judgment, an increased degree of stress and anxiety was registered. This made the researchers conclude that 'it is the inspection experience itself and not its outcome that is generating the psychological distress' (p. 28).

On a more positive note, McCrone et al. (2007) and Scanlon (1999) stated that the inspection can give teachers a moral boost if they are left with a feeling of being appreciated by the success of pupils and with pride about their own share in this result. Positive emotions related to the inspection can be a powerful source for teachers' motivation, resilience, perseverance and job satisfaction (Gu & Day, 2007). In a report commissioned by Ofsted (2007) on English schools removed from Special Measures, teachers' describe feelings of relief, recognition of success, euphoria, pride and delight when they feel their work is rewarded. Dealing with the aftermath of an inspection can also be emotionally draining for teachers. Different studies found that

absenteeism amongst teachers due to stress or illness is high in the period after the inspection (Brimblecombe et al., 1995; Ferguson et al., 1999; Kogan & Maden, 1999), although these nonappearances seem less likely to occur in schools with a constructive approach towards the inspection (Brimblecombe et al., 1995; Penninckx et al., 2014). In addition, as a result of the increased workload, fatigue, a decreased teaching effectiveness and a reduced professional enthusiasm were reported too (Case et al., 2000; Chapman, 2002; Perryman, 2009). Although this amount of extra work depends on the starting point of each school (Brimblecombe et al., 1995; MacBeath, 2008), these unintended effects were noticeable for a significant period of time following the visit (Lee-Corbin, 2005).

As mentioned earlier, these studies investigated teachers' emotions before, during or after a school inspection, rather than to focus on the feedback acceptance processes. This shows that the role of teachers' affective responses to feedback during a school inspection remains relatively unexplored and undervalued. Nevertheless, research in general indicates that performance feedback is emotionally charged and can diminish the recipients' self-esteem and pride (e.g. Ashford et al., 2003). Kluger and DeNisi (1996) found that negative feedback discouraged feedback recipients and decreased their motivation to improve. This was confirmed by a study of Sargeant et al. (2008), who examined physicians' acceptance and use of their multi-source feedback (MSF) reports. One-third of their respondents experienced strong emotions of anger and depression as a result of negative feedback and did not tend to use the feedback for further improvement. Earlier research concluded that unfavourable feedback resulted in negative emotions, such as shame and anger, and made recipients feel demoralised (e.g. Kernis & Johnson, 1990). In a study of Brett and Atwater (2001), recipients perceived negative feedback as less accurate and negative responses were reported.

These results suggest that both cognitive and affective responses to feedback seem to be essential for altering teachers' attitudes, perceptions and behaviour. In addition to theory development, understanding how individuals receive and react to feedback not only can enhance its acceptance, but also can contribute to quality-improvement in schools on the base of the provided inspection feedback.

## 3. Method

### 3.1 Approach

To understand the complexities of emotional processes, Schutz and Pekrun (2007) argued for the need to study emotions in real-life contexts. Therefore, we opted for qualitative research

with semi-structured interviews. This type of research provides an in-depth understanding of perceptions and emotions (Cohen, Manion, & Morrison, 2011).

### 3.2 Data collection

Convenience sampling was used to select the respondents in this study (Cohen et al., 2011). There were 34 primary schools in Flanders, who were inspected between February and March 2017. By the end of March, every school leader received a phone call, followed by an email informing them about the study. The school leaders were asked to contact teachers for participation in this study. In order to capture a broad view, Braster (2000) indicates that including five or more schools in the study enables to distinguish between individual and general features of schools and inspections. Although retrospective research suggests that individuals remember their emotions accurately after 90 days (Barrett 1997) as well as after 1 year (Röcke et al., 2011), current beliefs can influence the memory of prior emotional experiences (Robinson & Clore, 2002). Therefore, in this study, the period between inspection and the interview was kept as short as possible to capture the emotions as respondents initially experienced. In total, 21 teachers out of eight primary schools were interviewed between April and June 2017 (see Table 2). The respondents' level of teaching experience in primary education varied from five to 36 years. Some teachers (24%) had a management or coordination task at school.

Regarding the school network, both private and public schools were included. With regard to the school inspection advice, an equal amount of schools with a positive and restricted positive advice were included. An overview of the main characteristics of all participating schools is provided in Table 3.

Interviews lasted about 50 min. First, respondents were asked to fill out a three column worksheet. The first column held the source of feedback that provided information during the inspection process; the second showed the phase of the feedback reception and the third column held the content of the feedback. To obtain complete and accurate information on all sources of feedback during the school inspection process, respondents were asked to say out loud everything they thought about when answering the question. After that, we asked respondents to concentrate on and recall in detail moments of feedback they specifically accepted whether rejected in relation to school inspection feedback. This technique was used to recall data and explore the responses that influenced feedback acceptance. Semi-structured interviews were used to recall two till four feedback-related situations. Open-ended questions were asked to elicit rich descriptions of these situations. The interview schedule was used in all interviews to

assure methodological consistency and control for reliability (Cohen et al., 2011; Corbin & Strauss, 2008). Interviews were all administered face-to-face, were audio-recorded and transcribed verbatim.

**Table 2.** Overview of the participants

| School | Participant | Gender | Age | Teaching experience | School type |
|---|---|---|---|---|---|
| A | 1 | F | 51 | 25 + | Preschool teacher |
| A | 2 | F | 28 | 0 - 5 | Pupil care coordinator |
| A | 3 | F | 39 | 15 - 20 | Primary school teacher |
| A | 4 | F | 57 | 25 + | Preschool teacher |
| B | 5 | F | 49 | 25 + | Primary school teacher |
| B | 6 | F | 54 | 25 + | Primary school teacher |
| B | 7 | M | 35 | 10 - 15 | Primary school teacher |
| C | 8 | F | 54 | 25 + | Preschool teacher |
| C | 9 | M | 43 | 20 - 25 | Pupil care coordinator |
| D | 10 | F | 44 | 20 - 25 | Preschool teacher |
| D | 11 | F | 38 | 15 - 20 | Pupil care coordinator |
| D | 12 | F | 39 | 10 - 15 | Primary school teacher |
| E | 13 | F | 49 | 25 + | Pupil care coordinator |
| F | 14 | F | 30 | 5 - 10 | Primary school teacher |
| G | 15 | F | 45 | 20 - 25 | Primary school teacher |
| G | 16 | F | 35 | 10 - 15 | Primary school teacher |
| G | 17 | F | 47 | 20 - 25 | Primary school teacher |
| G | 18 | F | 44 | 20 - 25 | Preschool teacher |
| H | 19 | F | 50 | 25 + | Preschool teacher |
| H | 20 | F | 34 | 10 - 15 | Primary school teacher |
| H | 21 | F | 34 | 5 - 10 | Pupil care coordinator |

### 3.3 Data analysis

Interviews were audio-recorded and transcribed verbatim. The software package Nvivo10, a qualitative analysis tool from QSR International, was used to support the process of moving from inductive to deductive analysis.

To analyse data, a thematic approach was used (Braun and Clarke 2006). Firstly, all transcripts were read in an active way—searching for patterns and interesting ideas. Secondly, meaningful units in the transcribed interviews were generated. In a third step, codes were collated into themes and sub-themes. Fourth, themes were refined by reviewing their suitability for the data

set. Fifth, a final code tree was constructed, which represented the data as a whole. In the last step, the report was produced. The selected categories are used in the next session to present our findings (see Appendix Table A). The first author independently coded and analysed all the interviews. Throughout the research process, memos and theoretical notes were written by the first author. Reflections on the theoretical framework, interview questions, research sample as well as remarks on the coding and analysis have been regularly and thoroughly discussed in the research team during several peer debriefing sessions whereby unbiased peers assist in probing the researcher's thinking around all or parts of the research process to assure internal validity in the rest of the coding process (Mortelmans, 2007).

**Table 3.** Overview of the participating schools

| School | Nr of pupils | Nr of staff | Type of school | Context of the school inspection judgment |
|---|---|---|---|---|
| A | 250 – 300 | 15 – 20 | Subsidized free school | The inspection found that one education area was insufficient in preschool. Nevertheless, the school received the judgment 'positive' regarding education because the inspectors ruled "the school team has sufficient policy-making capacity to continue this development process under the leadership of the director and the core team." |
| B | 150 – 200 | 10 – 15 | Subsidized free school | The school received a positive inspection report regarding education. The school needs to address infrastructural problems. |
| C | 200 – 250 | 15 – 20 | Subsidized public school | The inspection found that both of the selected education areas were insufficient. The school received the judgment 'restricted positive'. |
| D | 250 – 300 | 20 – 25 | Subsidized public school | The school received a restricted positive' judgment for one education area, despite the good reviews of the teaching staff and principal. |
| E | 300 – 350 | 25 – 30 | Subsidized free school | The school received a positive inspection report regarding education. |
| F | 200 – 250 | 15 – 20 | Subsidized free school | The school received a positive inspection report regarding education. |
| G | 200 – 250 | 20 – 25 | Subsidized public school | The inspection found that both of the selected education areas were insufficient. The school received the judgment 'restricted positive'. |
| H | 300 – 350 | 20 – 25 | Subsidized free school | The inspection found that one education area was insufficient. The school received the judgment 'restricted positive'. |

## 3.4 Context of this study

The Flemish educational context is characterised by a large degree of school autonomy as schools develop their own curriculum, school work plan, teaching methods, student assessments and certification (OECD, 2015b). Since there are no central examinations, external evaluation of Flemish subsidised schools is only reserved for the inspectorate, an independent body under the direct jurisdiction of the Minister of Education and Training of the Flemish Government. The Decree declaring the Quality of Education (2009) explicitly stipulates Flemish schools as primary bodies responsible for the quality of the education they provide. Yet, the inspectorate evaluates whether the school meet the legal requirements, such as attainment targets, development goals and safety and hygienic aspects of school infrastructure.

The inspectors handle the CIPO-model (an acronym for context, input, process and output) (Scheerens, 2006). Each of these components—and its further divisions—is assumed to have an impact on the educational quality. The inspection process contains three phases: (1) a preliminary enquiry, (2) an audit and (3) an inspection report.

The preliminary enquiry includes, besides brief meetings with the school staff, a detailed analysis of the school's previous inspection reports and output data. When a school is visited during the audit phase, inspectors conduct lesson observations, analysis of school documents and interviews with members of the management and school staff. The data from these sources of information are accumulated throughout the evaluation process, resulting in a profile of a school's strengths and weaknesses (OECD, 2015b).

Finally, feedback is conveyed to the school in the form of an inspection report. This report is developed following a generic template for all levels of education and for all institutions, although it can be adjusted to a specific level when necessary or relevant. The outcome of the audit phase leads to an advice about two independent topics: on educational matters and on school infrastructure. These judgments are either 'positive', 'restricted positive' or 'negative'. This advice is based on a description of the school quality as inspected. Together with the above-mentioned school profile, this report is meant to be the basis for further school improvement. In Flanders, inspectors are not allowed to provide individual feedback on teachers or principals. For this reason, the inspection report can only contain feedback at school level. When feedback is targeted at teacher level, strict anonymity must be guaranteed (OECD, 2015b).

# 4. Results

## 4.1 Sources of feedback

In order to examine the sources of feedback that teachers report during a school inspection process (research question 1), we present descriptive results to emphasise the extent to which teachers receive feedback in the primary schools involved in the study. As summarised in Table 4, two main categories of feedback sources were distinguished during the school inspection process, namely feedback from the school inspection and feedback from other sources.

**Table 4.** Sources of teachers' feedback during the school inspection process and their absolute frequency

| Feedback sources | Absolute frequency |
|---|---|
| **School inspection** | |
| Preliminary enquiry: one-day school-visit | 12/21 |
| Audit phase: observation debriefing | 18/21 |
| Audit phase: debriefing session | 8/21 |
| The inspection report | 20/21 |
| **Other feedback sources** | |
| Principal | 14/21 |
| Colleagues | 10/21 |
| Other (Pupil care coordinator, counselling services, parents) | 7/21 |

### 4.1.1 School inspection

In chronological order, respondents declared to receive feedback directly from the school inspectors during the preliminary enquiry conversation, the observation debriefing and the final debriefing session. Furthermore, most respondents consider the final inspection report as a feedback instrument from the school inspectors as well. From the most useful to least useful, respondents distinguish feedback from the (lesson) observation debriefing, final debriefing session, inspection report and preliminary school visit conversation.

Half of the respondents (12 out of 21) attended a short interview with the school inspectors during the preliminary enquiry. According to the respondents, the inspectors were mainly looking for additional evidence to complete their analysis of the school's strengths and weaknesses and gave hardly substantive feedback. Yet, we found that nine respondents received reassuring feedback at organisational level during that talk, while three other respondents did not receive any feedback at all during this phase.

During the audit phase, almost every respondent encountered an inspector observing a lesson. Sometimes, inspectors visited a second lesson for a shorter period. After these observations, inspectors had a brief professional conversation with the individual teacher—or in large schools together with parallel teachers. Other respondents, who are responsible for key aspects of pupil care, had an interview with an inspector after the inspector gathered information about aspects of teaching and learning. The majority of respondents (18 out of 21) reported this post-observation debriefing as their most powerful feedback moment, although many respondents remained dissatisfied about the amount of received feedback. This feedback on lesson observation was generally at organisational level (information about lesson plans, teaching materials and activities) and less on the individual level. Still, the results indicate that many respondents gained new perspectives on their teaching activities. Only three of the participating teachers received no feedback during this personal interaction moment.

> *"We kind of missed that a little. Even though, we had an answer to everything, she just nodded, but apparently, she wasn't allowed to confirm whether it was good or not. So, that was something we couldn't infer."* (respondent 10)

At the end of the audit phase, inspectors met with a sample of staff to discuss the preliminary findings of the inspection team and provided an explanation for the final advice. Only a minority of respondents (8 out of 21) was present at this debriefing session. Half of these respondents reported that this session provided insights into how their teaching processes can be improved. Two other respondents mentioned that the inspectors gave nuance to the meaning of the restricted positive judgment and provided practical and useful feedback to stimulate school improvement. The two remaining respondents were both surprised by the negative feedback and used the opportunity to achieve more information about the underlying causes.

Finally, almost every respondent (20 out of 21) stated that they have read (or at least parts of) the final inspection report. According to these respondents, the report was considered to be helpful, although the content did not deliver new insights into school and teacher performance. Most respondents had already a good idea of the content of the final report as they were informed during or after the debriefing session. Other respondents were already aware of these priorities for improvement before the inspection. A last group of respondents thought the inspection report was less helpful because the report was not targeted at the individual teacher.

> *"On one hand, I think it is super that the report is so general, 'cause I wouldn't appreciate it at all if it would say "in fifth grade this". On the other hand, I find it*

*really tough, as a teacher, to assess if what it says now, is that referring to me or not (…) You can't ask anyone, 'cause other people don't really know either."* (respondent 3)

### 4.1.2 Other sources of feedback

While the feedback of school inspectors was mainly interpreted in terms of usefulness for their own practice, respondents looked at feedback of principal and colleagues from a different perspective. We did not find citations in which respondents suggested that feedback, gathered from their principal or colleagues during the school inspection process, resulted in the growth of new ideas, conceptions or beliefs. According to many respondents (14 out of 21), the principal served mainly as a source of encouraging and supportive feedback rather than a provider of substantive feedback. Two respondents, however, specifically felt abandoned by their principal and expressed the need for more supportive feedback during the school inspection process.

*"He recognised the amount of work has been done (…) He's absolutely supportive and makes sure there's energy in the team (…) He once said we had to respect our limits, and I thought that was awesome."* (respondent 2)

Nearly half of the respondents (10 out of 21) reported that they consulted their colleagues during inspection, although the information gathered was limited to supportive feedback. The small amount of evidence of substantive peer feedback compared with the extent to which respondents report supportive feedback is remarkable. Only four respondents indicated that the outcomes in the inspection report were discussed in teacher working groups during a staff meeting afterwards. During some interviews (4 out of 21), the pupil care coordinator was mentioned as a key figure in the school inspection process—especially when the principal was absent (illness, family circumstances), although his/her role in giving feedback was limited to motivating and encouraging feedback as well. The counselling services were only reported by respondents who were attending the debriefing session. Although their main task was to refine the school inspections' statements, respondents revealed that they felt acknowledged, listened to and understood because of the counselling services' rejection of some inspection feedback.

In sum, the results show that respondents viewed feedback from school inspectors most useful. Respondents received substantive inspection feedback during the observation debriefing and, when invited, the debriefing session at the end of the school inspection process. However, many respondents were still seeking more detailed feedback about their own performances and remained, therefore, unsatisfied. Reassuring feedback of principals and colleagues was

appreciated by the respondents, who did not expect additional information about their own performance from these parties during the school inspection process. As the results show that there was no substantial feedback given by other sources than school inspectors, the rest of this article will focus on teachers' cognitive and affective responses to school inspection feedback and its acceptance only.

### 4.2 Cognitive responses to feedback

To answer our second RQ (teachers' cognitive responses to school inspection feedback), three main cognitive responses to school inspection feedback were discussed by our respondents. First, we describe their perceptions of the school inspectors' credibility, which refers to one's expertise and trustworthiness (attitudes and motives). After that, respondents' perceptions of feedback fairness are described. During interviews, two types of organisational justice were distinguished by our respondents: distributive and procedural justice. Finally, in regard to the feedback content, respondents' cognitive responses were largely determined by the sign of the clarity and consistency have been discussed during interviews as well. Each of these feedback characteristics can be seen as important subthemes.

#### 4.2.1 Credibility of the feedback source

**Expertise.** With regard to content knowledge and pedagogical knowledge, half of the respondents mentioned the inspectors' broad knowledge about various domains in primary schools. The inspectors' feedback matched, to a large extent, respondents' own perceptions and was, therefore, easier to accept. Several respondents mentioned the balanced composition of the inspection team which facilitated the exchange of complementary know-how.

In contrast, less than one-third of respondents believed that inspectors were unable to link their knowledge and insights into current classroom situations. This was especially the case when inspectors arrived from a non-educational background. For that reason, these respondents reported they were unwilling to accept feedback that indicated a need for change.

> *"I then heard one's a sexologist and the other 's a speech therapist. There's nothing wrong with that. But then these people come and bring us down."* (respondent 9)

Some inspectors were perceived to be inadequately informed of educationally relevant cultural, ethnic and socioeconomic differences and corresponding—often financial—problems to meet these new demands. Also, the general ignorance on teachers' administrative workload was explicitly mentioned during the interviews.

> *"I said: madam, that's administration, again: that's nothing like reality at all. But she wouldn't have any of it, 'cause it wasn't written down anywhere. So, these people have clearly lost all touch with reality."* (respondent 15)

**Trustworthiness.** During interviews, the importance of inspectors' positive attitude towards the respondents was notable. Respectful, warm and supportive behaviour increased respondents' trust and confidence in the inspectors. According to respondents, this behaviour encouraged the acceptance of unfavourable feedback. This is in sharp contrast with one-third of the overall respondents who experienced difficulties with the inspectors' attitude. Those respondents described the inspectors' attitude as arrogant and disrespectful. Some inspectors displayed an inappropriate, sceptical attitude when they underscored the lack of reliable, accurate and adequate source documentation. These respondents assumed that this attitude signified the inspector's distrust in school staff and teachers. In return, these respondents mistrusted the school inspectors as well.

> *"Yeah, I wondered if they really appreciated what we're doing. Maybe that's putting it a little crudely, but I sometimes thought: are they making fun of us now?"* (respondent 8)

More than half of respondents defined their relationship with school inspectors as one in which they could communicate openly and honestly. They noticed that these inspectors communicated in a thoughtful, correct and quiet manner. The relaxed atmosphere throughout the evaluation was frequently mentioned. Two respondents reported a somewhat 'instructive' tone during their conversations.

> *"The observation and went rather nicely, the inspector also interacted smoothly with the children. The atmosphere was quite informal. I can't say a negative thing about it, he'd have been welcome for much longer for all I'm concerned. He wasn't impossible or didn't ask any difficult questions."* (respondent 19)

During the interviews, about one-third of respondents reported mistrust regarding the inspectors' motives. According to them, some inspectors arrived with preconceived ideas and were gathering information to affirm them. This is in contrast to the majority of respondents, who started with the presumption that inspectors ensure an honest and open dialogue, though they admitted that there were initial difficulties to operate collaboratively. These respondents were worried to expose too many details about the schools' weaknesses in this 'determining' evaluation process. These worries were put at ease when inspectors were perceived as interested

and concerned about teaching resources and approaches. Where respondents had the opportunity to reflect formally on the inspectors' preliminary findings and to influence recommendations, their positive perceptions about the school inspectors' motives were strengthened.

In sum, we find that the perception of school inspectors' credibility is an important factor in the respondents' feedback acceptance process. School inspectors are landed with the crucial task of creating trust among school staff and teachers in order to foster an open evaluation culture. However, when respondents mistrust the inspectors' motives and question their credibility, defensiveness and unreceptive reactions towards the school inspectors and their feedback occur.

### 4.2.2 Fairness perceptions of feedback

**Distributive justice.** The decisive importance of paper documentation was the most reported concern of outcome fairness among respondents. According to about half of the respondents, inspectors minimised the significance of papers in favour of actual teaching and learning processes at the start of the school visit. As an afterthought to this moment, one-third of respondents were sceptical of this statement. According to them, inspectors were looking for documented evidence of what was taught and criticised lacks in this area heavily.

To meet these requirements, more than half of respondents mentioned small adaptations of teaching materials (classroom walls, fabrication of documentations) and an adapting teaching style during the inspection process. Conversely, the other group of respondents refused to adjust materials for the forthcoming inspectors to provide a better image of the school. When these ambiguous activities took place in schools within the same school community, and these 'misleading' schools received a more favourable outcome, feelings of injustice among the non-misleading respondents were reinforced.

> *"These teachers are performing less well, but they are far keener to sell themselves. Therefore, they receive a better report. It is a shame inspectors don't notice that."* (respondent 1)

To a lesser extent, respondents contested the assigned weight of shortcomings in their feedback as inspectors did not take into account an important part of potentially visible points of the schools' progress. These respondents sensed inspectors' dilemmas between letting the teachers and principal work autonomously and intervening to keep control. Four of these respondents drew the short straw and received a restricted positive outcome for a subject that was already

under development. Although their negative feedback was perceived to be accurate, they felt distrusted and were disappointed in the final outcome.

In case of negative circumstances, a small group of respondents felt insufficiently supported as the inspectors did not respond to the needs of the staff and students after an occurrence that impacted the school environment. For example, death or a debilitating disease of a student or school member caused the staff to focus on other priorities to the detriment of the curriculum. According to these respondents, the inspectors refused to take into account these unfortunate circumstances for the final inspection advice which lead to unfavourable feedback. Although these respondents agreed with the feedback, they contested the assigned weight.

**Procedural justice.** The inspection procedure was generally perceived as a very subjective process. Regarding the role of school inspectors, different values, standards and ideas were mentioned by almost all respondents, even by those respondents who received favourable feedback. Almost half of respondents criticised school inspectors for bias and inconsistent behaviour. For example, different approaches between experienced and less experienced inspectors decreased respondents' trust in the process. Negative feedback, provided by less experienced perceived inspectors, was less readily accepted by these respondents. Respondents reported the inspector's perceived experience mostly when they received negative feedback, whereby more experienced inspectors were considered to be more reliable and less critical.

> *"Their expectations and aims are always a bit different. One may observe a class and not find anything wrong with it, while another will have loads of comments. You'll always have to wait and see." (respondent 6)*

In addition, when feedback between previous and current inspections differed significantly, despite the steps undertaken in light of previous recommendations and determinations, respondents reacted bewildered and did not agree with it.

In regard to the above-mentioned concerns, respondents were generally in favour of periodic (re-)visits with the same inspection team among schools within the same school community to ensure consistent and fair outcomes, and an improved trust in this external school evaluation.

Clusters of comments around the credibility of the feedback fairness revealed the importance of transparency and objectiveness given by the school inspectors during the school inspection. School inspections characterised by greater distributed and procedural justice resulted in a better understanding of school inspectors' expectations. Nevertheless, when there is doubt

about the objectivity or unbiased nature of the inspectors' approach, a culture of compliance is endorsed whereby schools seek to meet the demands of inspection rather than to embrace feedback as a learning opportunity.

### 4.2.3 Characteristics of feedback content

**Feedback sign.** Regarding feedback sign, most respondents referred to negative comments. Three respondents confessed they could not recall positive information since they were overloaded by information and absorbed negative feedback more strongly and in more detail. The maldistribution of positive and negative feedback determined the participants' willingness to respond to feedback.

> *"All kind of things. For example, for history I used the timeline and maps incorrectly. My test were too this and my reports were too that. He kept ranting on, really. Frankly, I found that quite tough. He also mentioned some positive things, but I really thought there were a lot more negative ones."* (respondent 1)

When inspectors paid tribute to the school staff, positive feedback was initially suspiciously received. When the overall outcome of the inspection was positive, respondents appreciated the positive findings and identified themselves more easy with the—small amount of—shortcomings. Our data indicated that small amounts of negative feedback were occasionally seen as opportunities to convince the school board to introduce changes or refresh some watered-down activities.

**Feedback constructiveness.** In terms of negative feedback, respondents generally made a difference between negative criticism and constructive feedback. More than half of respondents associated constructive feedback with terms such as 'advice', 'growing opportunities' and 'tips' to improve their teaching performance and—sometimes outdated—approaches. Where feedback was perceived as corrective instead, one-third of respondents felt threatened, certainly when the inspectors did not take into account the feelings of the respondent. When this unconstructive dialogue continued, two respondents mentioned they stopped reacting and processing at all.

> *"They literally told me our inclusion programme wasn't any good. That the children didn't get what they were entitled to (…) Everything I said to defend myself was rejected. After a while, I felt like: bring it on and I'll just keep quiet."* (respondent 9)

One respondent pointed to feedback that was targeted to a physical aspect of the person rather than a behavioural aspect. This information was perceived as personally threatening since this was not something readily changeable.

**Feedback clarity.** Almost all respondents compared the clarity between oral and written inspection feedback. During conversations with inspectors, most respondents received and agreed with clear and understandable feedback about their performances. A small group of respondents did not understand these spoken comments and preferred written feedback as it was formulated more concrete towards the schools' and teachers' teaching and learning processes. In most cases, however, respondents were very critical about the vague, general and abstract language that was used in the inspection report. Respondents were unable to distinguish their own weaknesses as the comments did not refer to individual teachers or grades.

> *"The inspection report was rather unclear. Whereas my conversation with the inspector was quite clear about our shortcomings, I couldn't always retrace that in the report. With quite a lot of cliché sentences, to me, it felt like there was a lot of copy/paste in it. I didn't enjoy reading it."* (respondent 14)

**Feedback relevance.** In general, feedback was considered to be relevant when it was related specifically to the classroom level. Most of the recalled feedback referred to core activities of teaching, such as lesson planning and preparation, learning instructions and the achievement of attainment targets and development goals. Comments about school-level factors (infrastructure and curriculum) were perceived less relevant as the majority of respondents felt less responsible for these domains. One-third of respondents disagreed with the equal weight for all subjects such as mathematics, language and music education. The reduced attention for spelling and the increasing importance of spoken languages and music education is a hard pill to swallow for these respondents. Although the feedback was perceived to be correct, respondents found it hard to accept it as they claimed that society and higher education are not adjusted to this view.

> *"I felt it was something that needed our attention, indeed, [...] but again, the force with which the hammer came down, was uncalled for, I think. On the other hand, think, phew, a good thing we passed for maths and failed the arts."* (respondent 12)

**Feedback accuracy.** With regard to the perceived accuracy of the school inspectors' feedback, almost all respondents stated that the school inspection did not lead to new insights into their teaching performance as most of the detected deficiencies were already included in the school

development plan. Yet, little less than half of respondents were pleasantly surprised by information about colleagues' performances and teaching approaches.

> *"Yes, of course. I thought the comments we got were fairly constructive, those remarks were correct, indeed. The comments are things we're aware of, but we're still to get started, it still needs to get done."* (respondent 7)

Nevertheless, while perceiving most feedback as correct and accurate, one-third of respondents stated that remarks were taken out of context. According to these respondents, the inspectors observed a single event (e.g. lunch break, punishments) which was then generalised although it did not represent the schools' daily practices. One respondent believed there was a misunderstanding between a colleague and school inspector which caused unfavourable—and allegedly incorrect—feedback about the primary teaching resources.

In sum, we find that most respondents agreed with the content of the inspection feedback, although they preferred positive feedback that is consistent with their selfperceptions When feedback is situated on the classroom level, respondents prefer clear, constructive feedback in the form of concrete tips and tricks. The results indicate that oral feedback is very often the best way to explain nuances in the inspection report or to improve individual teacher performance. Written feedback in the inspection report is mostly perceived as too vague, technical or general to be acted upon.

### 4.3 Affective responses to feedback

Respondents described varied emotional responses to the school inspectors' feedback (research question 3) (see Table 5 for an overview). Although most respondents experienced emotions of joy, anger and sadness, we did not find citations in which respondents suggested that they have experienced emotions of love, surprise and fear. However, we did find indications of the absence of emotions among respondents as some respondents stated they rather felt neutral about the feedback. Specially, when feedback indicated need for change in a specific area beyond the respondents' responsibility, feedback seemed processed with little emotional engagement.

In general, receiving positive inspection feedback induced emotions of happiness, satisfaction and relief. These appeared to be in response to feedback moments where respondents' expectations were met (happiness, satisfaction) or exceeded (relief). Furthermore, school inspectors who portrayed a positive attitude and acted in a friendly manner enhanced positive emotions of happiness and relief among respondents as well. These positive contacts stimulated

resilience and helped respondents cope with negative feedback. Furthermore, respondents mentioned positive affective responses when the school inspectors supported their ideas in the inspection report.

> *"I was relieved in the first place and felt better about it after having read the report. At that moment, I was like we're doing alright, a lot remains to be improved, but we're heading in the right direction. I didn't feel that way after the conversation."* (respondent 3)

The continuing demand for higher teaching standards and the administrative burden were a source of considerable exasperation for many respondents. In addition, few respondents disliked inspectors' recommendations when these demands were perceived as too challenging to apply in the classroom. Respondents' frustrations and annoyance increased even more when their feedback was perceived as too vague or abstract and respondents could not ask for further clarification. Regarding this unclear communication, one respondent experienced annoyance too.

> *"From this moment on, we do it strictly by the book. I refer to that little number for the umpteenth time, looks brilliant on paper. I reached the same number of goals, you know, no, I must 've done less. But they're committed to paper more stringently, so it'll be good … . frustrating."* (respondent 12)

While the content of the inspection feedback triggered strong emotions of frustration, negative perceptions of the school inspectors' attitude outraged less than one-third of respondents. Negative feedback evoked strong emotions of anger when respondents perceived the inspectors' attitude as arrogant, critical or corrective. Respondents who perceived feedback unfairness were likely to feel resentful or angry about the perceived injustice. When these feelings of unfairness were accompanied with un-empathic behaviour towards respondents, respondents mentioned angriness because of increasing levels of stress and pressure.

> *"Emotionally, I really find it quite tough for everyone […] I think it's not done just to pop in like that after ten years, to put a bomb underneath it all and then go for a nice cup of tea."* (respondent 11)

**Table 5.** Categorisation of experienced emotions among respondents and their frequency.

| Primary emotion | Secondary emotion | Tertiary emotions | Appraisal |
|---|---|---|---|
| **Love** | / | / | / |
| **Joy** | Cheerfulness (n=7) | Happiness | - Positive outcome<br>- Constructive feedback (useful tips)<br>- Pressure to innovate |
| | | Satisfaction | - Positive outcome<br>- Confirmation of hard work |
| | Relief (n=3) | Relief | - Outcome beyond expectations |
| **Surprise** | / | / | / |
| **Anger** | Exasperation (n=3) | Frustration | - Continuing teaching demands<br>- Increasing accountability demands (paper administration)<br>- Unachievable standards<br>- Unclear feedback |
| | Irritation (n=1) | Annoyance | - Unclear feedback |
| | Rage (n=5) | Dislike | - Unachievable standards |
| | | Outrage | - School inspector's negative attitude |
| | | Resentful | - Feedback unfairness |
| | | Anger | - School inspector's negative attitude<br>- Negative feedback<br>- Feedback unfairness<br>- Increasing stress and pressure |
| **Sadness** | Suffering (n=1) | Hurt | - Feedback on physical aspect |
| | Sadness (n=3) | Unhappiness | - Large amount of negative feedback<br>- Limited amount of positive feedback |
| | | Hopelessness | - Unachievable standards |
| | | Broken - Depression | - Feedback as self-criticism |
| | Disappointment (n=3) | Disappointment | - Restricted outcome, despite recognition of hard work |
| | | Defeated | - Unexpected, negative outcome |
| | Neglect (n=2) | | |
| **Fear** | / | / | / |

Unhappy emotional responses were associated with the delivery of large amounts of negative feedback and a limited amount of positive, constructive feedback. When school inspectors valued the hard work and dedication of the school staff and teachers, but the school received a restricted advice nevertheless, three respondents felt disappointed. In some cases, when the negative feedback came unexpected, respondents were defeated.

> *"Mind you, the team, everyone supported and comforted each other. It's not the team that fell apart, but it's as a team that we got a hammer onto our heads."* (respondent 11)

When respondents perceived the feedback as correct, but had no solutions to achieve the intended objectives, they reported emotions of powerlessness.

> *"A feeling of hopelessness, not anger, 'cause I agreed with what he said, else I might 've been angry if I hadn't agreed. I could agree with his comments, otherwise, yes, I might have been angry. But now, it was really a feeling of hopelessness."* (respondent 3)

One respondent felt broken inside after negative feedback in the inspection report at school level was interpreted as a criticism of the respondent's professional performance. As this respondent felt an emotional distant from her colleagues, she isolated herself socially, which intensified feelings of low self-worth and depression. Another respondent felt hurt when a school inspector gave feedback that was focused on a physical aspect of the person, rather than upon behaviour.

Altogether, positive feedback elicited emotions of joy. When respondents received negative feedback, respondents' self-perceptions and expectations made the difference between experiencing emotions of anger or sadness. With regard to sadness, the received feedback was generally perceived correct or constructive, although it was inconsistent with respondents' self-perceptions, while emotions of anger were reported when respondents disagreed with feedback.

## 5. Conclusion and discussion

When teachers receive feedback about their performance during school inspection processes, their responses to this feedback are crucial to determine whether this feedback is accepted or not. Up till now, little evidence was available on teachers' cognitive and affective responses to feedback with regard to feedback acceptance during a school inspection. Therefore, a qualitative study using semi-structured interviews was carried out in primary schools in Flanders. First, we

explored the different sources of teacher feedback and their perceived usefulness during a school inspection. Subsequently, we examined how teachers respond to feedback in order to offer insights into their feedback acceptance process.

Our first important finding is that teachers in this study are dissatisfied with the amount of individual feedback and advice they receive from school inspectors. The descriptive results indicate that teachers receive substantive, individual feedback during observation debriefings, but only to a limited extent. During the final debriefing session and in the inspection report, reference is made to feedback at school level exclusively, which does not always result in substantial new insights. In accordance with earlier studies (Kelchtermans & Vandenberghe, 1998; McCrone et al., 2007; Penninckx et al., 2014), the results in the present study clearly show that teachers highly value school inspectors' recommendations at teacher level. In some cases, teachers' desire to respond is hindered by the absence of guidelines to initiate and implement improvement actions. This lack of feedback can be explained by the strict legislation that forbids Flemish school inspectors to provide individual feedback (OECD, 2015b). Although teachers' feedback seeking is considered as important for their professional development, the question then arise, whether this individual feedback needs to come from a single lesson observation alone, due to the seemingly incompatible roles of both critical friend and assessor (Dobbelaer et al., 2017). Still, this finding underlines the importance of more focused feedback that not only takes into account the specific school context but also with individual differences between teachers in their class. Only in this way inspection feedback can play a key role in school improvement and teacher development.

Secondly, we find that the cognitive responses of participating teachers to the inspectors' credibility affected both the acceptance of inspection feedback, as well as their affective responses to this feedback. Teachers who mistrust inspectors' expertise and trustworthiness are more likely to display an unreceptive reaction towards negative feedback. Under these circumstances, emotions of anger, even outrage, are reported. Conversely, inspectors who are perceived as helpful and facilitating make it much easier for teachers to accept unfavourable feedback. Our findings are consistent with those of previous studies (e.g. Brett & Atwater, 2001; Ehren & Visscher, 2008). In terms of feedback fairness, our study suggests that perceptions of organisational injustice negatively affect teachers' acceptance of negative inspection feedback and evoke strong emotions of anger and resentfulness, even depression was mentioned. For many of our respondents, these emotions were still evident during the interview. In addition, the majority of teachers, whether they received negative feedback or not, emphasise how

inspectors' expectations and behaviour vary across time. The importance of clear expectations of school inspectors for feedback acceptance was also indicated by Gustafsson et al. (2015).

Finally, feedback, consistent with or higher than respondents' self-perceptions, led to explaining the inspection feedback in terms of feedback characteristics (accuracy and relevance) rather than discussing their perceptions of source credibility. Teachers react surprised, happy and relieved when their expectations are exceeded and are more likely to accept this feedback, even when it is negatively formulated. In contrast, teachers react disappointed, and even defeated, when their feedback falls below expectations. These findings coincide with previous results found in the literature (e.g. Sargeant et al., 2008).

The methodology in this study provided a rich description of teachers' cognitive and emotional reactions, especially their negative responses to inspection feedback and the influence of these responses upon feedback acceptance. However, this study also has its limitations that need to be considered in evaluating the findings. First, the volunteer nature of respondents might have created a potential bias. Principals in schools with a negative inspection outcome refused participation in the study to reduce the levels of stress and anxiety among their teaching staff after the school inspection. Since our conclusions are based on the perceptions of teachers in school with a (restricted) positive outcome, the exclusion of schools with negative inspection outcome may have drew a more positive image. Second, although our sample was selected to represent the diversity of schools in Flanders, since only 21 teachers from eight different primary schools were interviewed, conclusions and generalisations have to be drawn carefully. Finally, although we examined source and message characteristics, personal characteristics of the feedback recipient (teacher) were not included in this study. Nevertheless, in our study, it appeared that the self-perceptions of participating teachers play an important role in the acceptance of negative feedback. Future research might provide more insight to what extent teacher characteristics are determining the feedback acceptance process.

The findings of the present study may also serve as a valuable starting point for longitudinal research. To gain more insight in teachers' affective responses to school inspection feedback, future research needs to look more deeply into the role of emotions in the feedback acceptance process. In this study, affective responses to feedback were still present, weeks after the school inspection visit. Therefore, a longitudinal study might provide insights into the duration and intensity of these responses. In summary, we conclude that the acceptance of feedback depends largely on the cognitive and affective responses of teachers. Our findings suggest that, especially in the case of negative feedback, negative perceptions of school inspectors' credibility and

organisational justice evoke strong negative emotions, such as anger and frustration, which can prevent feedback acceptance. In order to enhance feedback acceptance and improve performance, we suggest the need for initiatives for school inspectors (and other evaluators) that raise awareness in providing feedback (Kluger & DeNisi, 1996).

From a practical perspective, the finding that the acceptance of school inspection feedback is influenced by teachers' cognitive and affective responses opens up new opportunities to support teacher improvement. When policy-makers and school inspectors want to improve teachers' acceptance of feedback, there is a need to foster dialogue and mutual understanding between schools, teachers and school inspectors. Therefore, it is vital that school inspectors are made aware of the benefits in providing feedback in such a way that feedback recipients are more receptive to unfavourable, but substantive feedback.

## Appendix

**Table A.** Coding scheme (1/2)

| Theme / Subtheme | Conceptual characteristics and example data |
|---|---|
| **Feedback acceptation** | |
| / Acceptance | Respondent accepts feedback, thinks feedback is an accurate portrayal of performance<br>*"That we currently have no vision in language policy is criticism that I accept."* |
| / Rejection | Respondent does not agree with feedback, think feedback is unjustified<br>*"I really did not agree with that comment, but I could only keep silent because then I ruined it for the whole school."* |
| **Cognitive responses** | |
| / Source credibility | |
| //Expertise | Level of knowledge (both content and pedagogical)<br>Research skills (interrogation, questioning)<br>*"They had a broad knowledge. They knew what they were talking about and they knew a lot about the school."* |
| //Trustworthiness | Attitude of the inspector(s)<br>Communication style of inspector(s)<br>*"I did not know whether what I said was good, but I thought those people were correct."* |
| / Fairness Perceptions | |
| //Distributive Justice | Fairness of outcomes/decisions<br>Fairness of consequences<br>Feedback comparison with others (schools/teachers)<br>*"Until recently, we were the same school. Some colleagues also work there. They have arranged everything in advance, so they received a favourable advice. That is writhing here. I think we also had a different advice if we had prepared better in advance."* |
| //Procedural justice | Fairness of process<br>Level of transparency<br>Level of bias / Subjectivity<br>Involvement in the process (level of dialogue)<br>*"In the other department of the school they were three other inspectors. They are not going to use the same standards or they are not just as critical … I want to show how subjective it all is."* |

**Table A.** Coding scheme (2/2)

| Theme / Subtheme | Conceptual characteristics and example data |
|---|---|
| / FB characteristics | |
| //FB Sign | Positive feedback (opportunities, tips, advice)<br>Negative feedback (criticism) |
| //FB Constructiveness | Serving a useful purpose; tending to build up |
| //FB Clarity | Degree of clarity; level of understanding by respondent<br>Abstract/vague FB<br>Difference between written and oral FB |
| //FB Relevance | Relevance teacher-level (classroom): courses, goal achievement, evaluation, learning instructions, lesson planning<br>Relevance on school-level: curriculum, infrastructure, mutual coordination |
| //FB Accuracy | The degree of accuracy (correct, precise)<br>FB Context |
| **Affective responses** | |
| /Love | An intense feeling of deep affection<br>*No examples available in the present data set* |
| /Joy | A feeling of great pleasure and happiness |
| /Surprise | An unexpected or astonishing event, fact, or thing |
| /Anger | A strong feeling of annoyance, displeasure, or hostility |
| /Sadness | The condition or quality of being sad |
| /Fear | An unpleasant emotion caused by the belief that someone or something is dangerous, likely to cause pain, or a threat. |

# STUDY 2

# *A Full Array of Emotions: An Exploratory Mixed Methods Study of Teachers' Emotions during a School Inspection Visit*

**THIS CHAPTER IS BASED ON**

*Quintelier, A., Vanhoof, J., & De Maeyer, S. (2019). A full array of emotions: An exploratory mixed methods study of teachers' emotions during a school inspection visit. Studies in Educational Evaluation, 63, 83-93.*

**ABSTRACT** *Scholars often focus on the presence of teacher stress and anxiety as emotional side effects of a school inspection, though this limited focus has resulted in an incomplete view of teachers' experiencing of other emotions. Additionally, lack of evidence on positive emotional inspection outcomes raises questions about the presence of such emotions during a school inspection visit. In this study, we examined the presence of teachers' emotions with regard to different moments during the actual school visit. Additionally, we explored teachers' cognitive responses associated with the experience of these emotions. Survey data from 316 teachers in 42 primary schools is analysed using multilevel analyses. Findings show that emotions of joy were most frequently reported with regard to the three moments. Emotions of anger and sadness were reported to a lesser extent. Findings showed that friendly, constructive and transparent communication between both parties is important for teachers' experience of positive emotions.*

## 1. Introduction

Education stakeholders are often sceptical of inspectorates' pursuit of school development and educational quality (Landwehr, 2011). School inspections can have significant financial and reputational consequences for below-average performing schools (Case et al., 2000; Jones and Tymms, 2014), and they can also cause emotional distress and mental health problems among teachers (e.g. Ehren et al., 2013; Penninckx and Vanhoof, 2015; Perryman 2006, 2007; Quintelier et al., 2016, 2018). As Brunsden et al. (2006) indicated, even schools that have positive inspection outcomes have an increased degree of teacher anxiety and stress as a result of such inspections. Brunsden et al. (2006) therefore concluded that 'it is the inspection experience itself and not its outcome that is generating psychological distress' (p. 28). From this perspective, understanding the relationship between a school inspection and teachers' emotions is essential. As the nature and intensity of emotions can vary according to the particular inspection situation (Frijda, 1993), the study of teachers' emotions during a school inspection visit should include measures related to different events during such a visit.

In general, researchers identified the notification period (Brimblecombe, Shaw, & Ormston, 1996), lesson observations (e.g. Wilcox and Gray, 1996), the absence of feedback after the lesson observation (Brimblecombe et al., 1996; Quintelier et al., 2018) and the unfavourable consequences of a negative inspection outcome (e.g. Hopkins et al., 2016; Penninckx et al., 2014) as sources of anxiety and frustration among teachers. However, teachers' negative emotions decrease when inspectors are perceived as professional, collegial and nonthreatening

(McNamara and O'Hara, 2006). A positive inspection outcome and feeling appreciated by inspectors can engender emotions of relief, euphoria and pride among teachers (McCrone et al., 2007; Ofsted, 2007; Quintelier et al., 2018).

Penninckx and Vanhoof (2015) reviewed evidence of the existence of emotional side effects of school inspections among school leaders and teachers. Remarkably, in each of the 28 reviewed studies, school inspections led to the experiencing of negative emotions, such as anxiety and anger, while positive emotions were infrequently reported in the results sections. Inevitably, this emphasis on negative emotions raises certain questions—i.e. whether school inspections elicit the emotions of joy and happiness as well as whether the research community has neglected reporting these emotions (Penninckx & Vanhoof, 2015). To correct this imbalance, the current knowledge base would benefit from studies that examine and understand the presence and intensity of various emotions. Therefore, the general aim of this study is to examine and understand teachers' emotions, their intensity and the precise moment during which a school inspection evokes them.

In addition, there is broad consensus on the importance of cognitive responses (or thoughts) as key precursors of emotions (Frenzel et al., 2009). According to proponents of appraisal theory (e.g. Frijda, 1993; Lazarus, 1991; Scherer, 2005), individuals evaluate whether a situation is relevant to their goals or well-being. Consequently, emotions occur as a response to the evaluation of the event (Roseman & Smith, 2001; Smith & Lazarus, 1990). As these cognitive responses arise from individuals' beliefs and past experiences, the same event elicits different emotions in individual people (Lazarus, 1991; Sutton & Wheatley, 2003). While the assumption that teacher emotions –and their intensity– result from appraisals pertaining to teaching goals (e.g. maintaining order, helping students reach learning goals), have been substantiated by multiple studies on teachers' emotions and teacher burn out (Chang, 2009; Frenzel, 2014; Sutton & Wheatley, 2003), the relationship between teacher emotions and their cognitive antecedents in school inspection context remains largely unexplored.

As Day and Lee (2011, p. 2) highlighted, both emotions and cognitive responses are key factors in 'teachers' capacities to transform their circumstances, as well as in their responses to change'. General research on feedback has previously substantiated the essential role of emotions and cognition for learning, motivation and feedback acceptance (e.g. Brett & Atwater, 2001; Greller & Herold, 1975; Ilgen et al., 1979; Leung et al., 2001). Additionally, a recent study of Schweinberger et al. (2017) found that teachers' evaluation of school inspectors' feedback strongly impacts on knowledge acquisition within the school. From this perspective, research

on the interplay of teachers' emotions and cognitive responses during a school inspection visit can contribute to further knowledge development on how school inspections can encourage behavioural change among teachers (Ehren & Visscher, 2008).

Based on the above discussion, the aims of the study are twofold. First, only a few studies in the field of inspection research have involved a quantitative analysis of teachers' emotions during a school inspection visit. To overcome this research lacuna, quantitative data will be used to examine the intensity and key moments of teachers' emotions with regard to (1) the introductory meeting, (2) their conversation with the inspectors and (3) the final inspection outcome (RQ1). Second, as suggested by Creswell and Plano Clark (2017), expanding the quantitative approach to research on emotions by incorporating qualitative analysis would provide a unique angle that could deepen understanding of the role of emotions in feedback acceptance. Therefore, qualitative evidence will be used to examine how these data serve to contribute to a more comprehensive understanding of the quantitative differences in teachers' emotions and to explore how teachers' emotions are associated with teachers' cognitive responses to the inspection visit (RQ2).

Thus, this study adds to the literature by using a mixed methods design that allows an in-depth understanding of teachers' emotions during a school inspection visit. This design may help address some of the challenges in conducting a school evaluation, and, potentially, minimise negative emotional experiences of teachers under these circumstances.

## 2. Conceptual framework

Prior to addressing the methodology and results of the current study, a conceptualisation of each of the concepts is presented. Thereafter, we provide a brief explanation of why Parrott's (2001) emotion classification is used to describe teachers' affective responses during a school inspection. We conclude this section with an overview of findings from earlier research on the emotional side effects of a school inspection on teachers.

### 2.1 Emotions, affective responses and cognitive responses

Keltner and Ekman (2003, p. 163) defined *emotions* as 'brief, rapid responses involving physiological, experiential, and behavioural activity that help humans respond to survival-related problems and opportunities'. While comparing and integrating different theories and models on emotions, Sander (2013) distinguished comparable characteristics of emotions, such as multiple components, brief duration and rapid changeable. In addition, Sander (2013) also focused on the importance of the cognitive antecedents of emotions.

In line with the appraisal theory, Sander (2013) emphasised the interplay between emotions and cognition and determined that evaluations (appraisals) of situations and events, rather than the events themselves, elicit emotions (e.g. Frijda, 1993; Lazarus, 1991; Roseman & Smith, 2001). Differences in these evaluations occur due to individuals' *cognitive responses* (i.e. thoughts that occur during the evaluation of these events), which depend on individuals' beliefs and past experiences. *Affective responses* refer to how an event makes an individual feel (Chen et al., 2017).

### 2.2 Categorisation of emotions

Most research on emotion has shown a distinction between positive and negative emotions (e.g. Sander, 2013; Sutton and Wheatley, 2003). Positive emotions (e.g. happiness and joy) refer to the emotions that arise when an individual is making progress towards a goal while negative emotions (e.g. fear, anger, and sadness) stem from goal incongruence (Izard, 2007, 2011; Schutz et al., 2011). However, since surprise has been depicted as an emotion that can be both positive and negative (see Fontaine et al., 2007) this dichotomous classification may be too simplistic.

In another approach to emotion classification, Parrott (2001) divided six primary emotions— i.e. love, joy, surprise, anger, sadness and fear—into non-basic secondary and tertiary emotions (see Table 1). The secondary division contains more emotions within each primary emotion group. Table 1 also shows a third level, which includes an extension of the branches from the secondary emotion group. According to Bahia et al. (2013) and Chen (2016), this classification best fits the study of emotions in the educational setting. Parrott did not only identify more than 100 emotions and provided a comprehensive overview of human emotions; he also identified the connection between varying emotions. Therefore, this classification of emotions provides a rich framework to analyse the emotions of teachers in this study (Chen, 2016).

### 2.3 Emotional side effects of school inspections on teachers

Findings from Penninckx and Vanhoof's (2015) review revealed that anxiety and stress were the most frequently reported negative side effect of school inspections on teachers. Experiences of anger, frustration, grief, guilt and resentment have been reported to a lesser extent. Research in school inspection context has provided evidence that school inspectors' credibility, such as their attitude, expertise and communication skills, as well as the final inspection outcome are associated with teachers' emotions (McNamara & O'Hara, 2006; Penninckx & Vanhoof, 2015). To a lesser extent, inspection research has demonstrated the importance of the perceived fairness and accuracy of the inspection process and feedback message regarding the emotions that teachers experience (e.g. Gustafsson et al., 2015).

In another study, Penninckx et al. (2015) compared school staff's emotions before, during and after an inspection. A strong increase in anxiety and stress was found before and during the inspection. As research has shown, during a school inspection visit, teachers perceive the need to perform well and demonstrate their competences. However, since they are unable to control the situation in which they have to operate, teachers experience anxiety and psychological distress (Perryman, 2006). Teacher anxiety and stress were also reported when inspectors observe lessons and interview teachers (Macbeath, 2008; Varnava and Koutsoulis, 2016). Moreover, Dean (1995) determined that certain strategies, such as meeting the inspectors in advance and gaining information about the inspection procedure and evaluation criteria, lowered teachers' anxiety and stress it ('fear of the unknown') but did not remove them entirely.

Fear and anxiety are experienced to a lesser extent when teachers perceived school inspectors as respectful, professional, friendly and nonthreatening (Ehren & Visscher, 2008; McNamara & O'Hara, 2006; Penninckx et al., 2016). Receiving feedback can cause anxiety when teachers feel that their professionalism is questioned or when they have no opportunities to discuss this feedback. Conversely, teachers have reported feeling disappointed and stressed when they were unable to discuss the inspectors' feedback after lesson observations (Brimblecombe et al., 1996). Finally, the consequences of a negative school inspection outcome, in terms of the use of sanctions and rewards, can also cause teacher anxiety (Hopkins et al., 2016). Research has shown that if a school is judged to be failing, teachers and school leaders experience frustration, anger, depression, fear and shame (Gärtner, Hüsemann, & Pant, 2009). Brunsden et al. (2006) also found that schools that receive a positive outcome are not immune to negative emotions. as an increased level of anxiety was noted in such cases. Thus, the researchers concluded that 'it is the inspection experience itself and not its outcome that is generating the psychological distress' (Brunsden et al., 2006, p. 28).

The low visibility of positive emotions such as joy in inspection research raises questions about the presence of these emotions during a school inspection. Only a few studies have identified a positive inspection outcome and the perception of being appreciated by inspectors as sources for the emotions of satisfaction, relief, euphoria and pride among teachers (McCrone et al., 2007; Ofsted, 2007; Quintelier et al., 2018). Such emotions are regarded as a powerful source for teachers' motivation, resilience, perseverance and job satisfaction (Day and Lee, 2011; McCrone et al., 2007, Scanlon, 1999).

Although stress and emotions are related constructs, findings from previous research have shown that the experience of stress is often associated with negative emotions, such as

depression, anxiety and anger, and that stress is an expression of underlying emotional responses to a specific situation or event (Dickerson and Kemeny, 2004; Folkman, 2008; Lazarus, 2001). Consequently, solely considering stress as the most important emotional side effect of school inspections results in a limited and oversimplified view of the full array of emotions (Lazarus, 2001).

**Table 1.** Parrott's emotions by group

| Primary emotion | Secondary emotion | Tertiary emotion |
|---|---|---|
| **Love** | Affection | Adoration, Fondness, Liking, Attractiveness, Caring, Tenderness, Compassion, Sentimentality |
| | Lust | Arousal, Desire, Passion, Infatuation |
| | Longing | Longing |
| **Joy** | Cheerfulness | Amusement, Bliss, Gaiety, Glee, Jolliness, Joviality, Joy, Delight, Enjoyment, Gladness, Happiness, Jubilation, Elation, Satisfaction, Ecstasy, Euphoria |
| | Zest | Enthusiasm, Zeal, Excitement, Thrill, Exhilaration |
| | Contentment | Pleasure |
| | Pride | Triumph |
| | Optimism | Eagerness, Hope |
| | Enthrallment | Enthrallment, Rapture |
| | Relief | Relief |
| **Surprise** | Surprise | Amazement, Astonishment |
| **Anger** | Irritation | Aggravation, Agitation, Annoyance, Grouchy, Grumpy, Crosspatch |
| | Exasperation | Frustration |
| | Rage | Anger, Outrage, Fury, Wrath, Hostility, Ferocity, Bitter, Hatred, Scorn, Spite, Vengefulness, Dislike, Resentment |
| | Disgust | Revulsion, Contempt, Loathing |
| | Envy | Jealousy |
| | Torment | Torment |
| **Sadness** | Suffering | Agony, Anguish, Hurt |
| | Sadness | Depression, Despair, Gloom, Glumness, Unhappy, Grief, Sorrow, Woe, Misery, Melancholy' |
| | Disappointment | Dismay, Displeasure |
| | Shame | Guilt, Regret, Remorse |
| | Neglect | Alienation, Defeatism, Dejection, Embarrassment, Homesickness, Humiliation, Insecurity, Insult, Isolation, Loneliness, Rejection |
| **Fear** | Horror | Pity, Sympathy |
| | Nervousness | Alarm, Shock, Fear, Fright, Horror, Terror, Panic, Hysteria, Mortification |

*Source: Parrott (2001)*

Given the importance of emotions and cognition as essential for learning, motivation and feedback acceptance processes (Brett & Atwater, 2001; Day & Lee, 2011), this study examined the interplay between teachers' affective and cognitive responses during a school inspection. It aims to contribute to further knowledge development on how school inspections can encourage behavioural changes among teachers (Ehren & Visscher, 2008).

## 3. Method

An intra-method mixing approach was adopted to answer the research questions. The quantitative data were obtained through closed-ended questionnaires; the qualitative data were gathered from brief, open-ended questions. Multilevel models were used to interpret and compare teachers' emotions in schools, while the open-ended questions added contextual information to the quantitative measurements (Cohen et al., 2011). Since this study was conducted in Flanders, we first provide an overview of the Flemish school inspection procedure.

### 3.1 Research context

The Flemish educational context is characterised by a large degree of school autonomy, as schools develop their own curriculum, schoolwork plan, teaching methods, student assessments and certification (OECD, 2015b). Since there are no central examinations, an external evaluation of Flemish subsidised schools is reserved for the Flemish Inspectorate of Education, an independent body under the direct jurisdiction of the Minister of Education and Training of the Flemish Government. Once every six years, the Inspectorate examines the extent to which the school's offered education meets the quality expectations of the reference framework and determines whether it is in line with the regulations. Additionally, they investigate the extent to which a school develops its own quality with regard to management and quality assurance of teaching and learning practices. The Inspectorate also has a stimulating role that involves engaging in a development-oriented dialogue with teachers and school management (Vlaams Ministerie van Onderwijs en Vorming, 2016).

After an introductory meeting between the visiting inspection team and the school staff, the inspection procedure begins with the audit phase. The audit draws upon an analysis of the school's and teachers' documents and observations, supplemented by conversations with the school policy team, teaching staff, pupils and pupils' parents. At the end of the audit, inspectors challenge the school staff to reflect on assumptions about the school's educational quality during discussions. Doing so enables teachers to understand the discrepancies between current and desired practices. After these meetings, the final outcome of the inspection determines whether

or not the school retains its recognition. There are two possible inspection outcomes: (a) a favourable opinion (with or without major shortcomings) and a school's retention of its recognition without a follow-up or (b) an unfavourable opinion and the initiation of the withdrawal procedure of the recognition starts unless the school sets up an improvement plan and obtains assistance from an external agency. An inspection report is developed based on a generic template, and visual means are used to present the school's strengths and shortcomings. In order to support quality improvement, opportunities for improvement are addressed too (Vlaams Ministerie van Onderwijs en Vorming, 2016).

### 3.2 Respondents and data collection

Convenience sampling was used to select the respondents in this study (Cohen et al., 2011). The sample included every primary school in Flanders (Belgium) that was inspected between January and May 2018. Although retrospective research has suggested that individuals remember their emotions accurately after 90 days (Barrett, 1997) as well as after one year (Röcke et al., 2011), current beliefs can influence the memory of prior emotional experiences (Robinson and Clore, 2002). Therefore, the period between inspection and the data collection was kept as short as possible to capture the emotions respondents experienced. Between two and eight weeks after the inspection, every school leader of the 165 inspected primary schools received a phone call, which was followed by an email informing them about the study. When school leaders agreed to participate, paper or online questionnaires (school leader's preference) were sent to staff members in teaching or managing positions in these schools. A preliminary version of the questionnaire was discussed with three teachers of a recently inspected primary school (this school was excluded from further participation). The feedback gained from these discussions led to adaptations to the final questionnaire. The data of 316 teachers were collected in 42 schools. With regard to the inspection outcome, only schools who received a favourable opinion were willing to participate. From the 165 contacted schools, 159 received a favourable opinion (96%), while six schools (4%) received an unfavourable opinion (Onderwijsinspectie, 2019).

We surveyed both preschools and primary schools. Regarding the school network, both private and public schools were included. A total of 34.4% of the respondents were from preschools, and 59.0% worked in primary schools. A total of 6.7% worked as preschool and primary teachers. The mean age of the respondents was 39 years, and the range of ages spanned from 21 to 59 years of age. Mean of respondents' teaching experience in their current school was 13.8 years (experience range: 1–39 years of experience), while their overall teaching experience was 17.3 years. In this sample, 76.1% of the respondents are employed full-time, 23.9% of the respondents

are employed part-time. Further, 87.7% of those taking part in the study were women, and 12.3% were men. These figures indicate a good representation with regard to the target population: Of all teachers in Flemish schools, 13.5% are men and 86.5% are women (Vlaamse Overheid, 2018).

## 3.3 Measures

### 3.3.1 Quantitative data

Teachers were asked to describe the presence and intensity of emotions with regard to (1) the introductory meeting; (2) the respondent's meeting ('inspection meeting') with the inspection team about the professional practice and the learning and teaching quality; and (3) the announcement of the final outcome.

Based on previous school inspection research (see 1.1) and in line with Parrott's classification (2001), we selected 13 emotions that can be distinguished into the following primary emotion categories: (1) joy: satisfaction, relief and pride; (2) anger: anger, frustration and annoyance; (3) sadness: hurt, unhappy, disappointment, humiliation and dejection; (4) surprise; and (5) fear. Respondents were asked to rate the extent to which they had felt each of the above-mentioned emotions on 5-point scales that ranged from 1 (not at all) to 5 (to a very great extent).

The sample of 316 teachers was approached to conduct exploratory factor analysis (EFA) for each to generate the model using R 3.5.1. To develop the model, cut-off values of 0.40 were used as a minimum for significant factor loadings (Stevens, 2012). Other items were removed when they did not match logically and theoretically with other items in the same factors. During this process, 3 items (anger, disappointment and unhappy) were dropped.

Subsequently, we conducted a confirmatory factor analysis, using the Comparative Fit Index (CFI), Tucker Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA) and (Standardized) Root Mean Square Residual (SRMR) as fit indices for each moment of measurement (introductory meeting, inspection meeting, and announcement of the final outcome). Hu & Bentler's (1999) cut-off values were used as indications for a good model fit: CFI and TLI values between 0.90 and 0.95 or greater, RMSEA values between 0.08 and 0.06 or below, and SRMR values between 0.10 and 0.08 or below, although some authors consider these criteria as too strict (Marsh et al., 2004). The results from the CFA reveals that the fit of the instrument was between good and sufficient for the introductory meeting (CFI=0.995; TLI=0.992; RMSEA=0.040; SRMR=0.022), inspection meeting (CFI=0.981; TLI=0.968; RMSEA=0.083;

SRMR=0.038) and announcement of the final outcome (CFI=0.985; TLI=0.975; RMSEA=0.070; SRMR=0.044).

Additionally, we calculated the Cronbach's alpha values to evaluate the reliability of the instrument. As Table 2 shows, the Cronbach's alphas for these scales were satisfying (anger, unhappy and disappointment were not included to calculate Cronbach's alpha and were excluded from further quantitative analysis too).

**Table 2.** Psychometric and descriptive statistics

| | | M1 | | M2 | | M3 | | M1 | M2 | M3 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Primary emotion** | **Secondary and tertiary emotions** | **mean** | **sd** | **mean** | **sd** | **mean** | **sd** | **Cronbach's alpha** | | |
| **Joy** | **Satisfaction** | 3.02 | 1.00 | 3.27 | 1.17 | 4.03 | 1.08 | 0.79 | 0.91 | 0.90 |
| | **Relief** | 2.75 | 1.20 | 3.08 | 1.22 | 3.95 | 1.13 | | | |
| | **Pride** | 2.31 | 1.18 | 3.08 | 1.27 | 3.89 | 1.26 | | | |
| **Anger** | **Frustration** | 1.27 | 0.69 | 1.43 | 0.89 | 1.37 | 0.89 | 0.95 | 0.92 | 0.89 |
| | **Annoyance** | 1.22 | 0.63 | 1.34 | 0.82 | 1.27 | 0.79 | | | |
| | ***Anger*** | *1.06* | *0.39* | *1.13* | *0.59* | *1.08* | *0.52* | | | |
| **Sadness** | **Hurt** | 1.05 | 0.30 | 1.18 | 0.65 | 1.15 | 0.63 | 0.94 | 0.89 | 0.77 |
| | **Humiliation** | 1.03 | 0.28 | 1.12 | 0.57 | 1.04 | 0.29 | | | |
| | **Dejection** | 1.07 | 0.42 | 1.17 | 0.65 | 1.14 | 0.61 | | | |
| | ***Unhappy*** | *1.06* | *0.38* | *1.22* | *0.74* | *1.18* | *0.66* | | | |
| | ***Disappointment*** | *1.12* | *0.51* | *1.43* | *0.91* | *1.41* | *0.96* | | | |
| **Surprise** | **Surprise** | 1.91 | 1.11 | 2.12 | 1.17 | 2.34 | 1.36 | / | / | / |
| **Fear** | **Fear** | 1.59 | 0.81 | 1.44 | 0.84 | 1.07 | 0.43 | / | / | / |

### 3.3.2 Qualitative data

Following each of these close-ended questions, respondents were asked a brief, open-ended question regarding why they had experienced these emotions in each of the moments. With this question, respondents could clarify their quantitative answers and provide details on the self-perceived causes for these emotions during the school inspection visit (Cohen et al., 2011).

## 3.4 Data analysis

### 3.4.1 Quantitative data

Our data can be viewed as multilevel multivariate data where responses at different time points (M1, M2, M3) are treated as different variables (Skrondal & Rabe-Hesketh, 2008) that are modelled simultaneously. These responses are a series of repeated measurements nested within individual subjects (teachers; level 2; N=316) within individual schools (level 3; N=42). Therefore,

multilevel models were implemented to account for the fact that observations are not independent (Hox, 2017).

In these models, we modelled three intercepts (being a mean score at each moment), three variances between teachers and three variances between schools (one per moment so the model considers that the variance between teachers and schools can be a function of the moment in the procedure). Given that we model a separate intercept for each measurement occasion, no variance is left at the lowest level (the responses at different time points within a teacher), so in the model this variance is fixed to the value zero. An analysis was conducted separately for each of the five primary emotions: joy, surprise, anger, sadness and fear.

The R-package 'nlme' (Pinheiro et al., 2014) was used for the estimation. The R package ggplot2 (Wickham, 2016) was used to visualise the results.

### 3.4.2 Qualitative data

To integrate the findings of the closed questions and open questions in the questionnaire, we selected five schools with the highest aboveaverage scores for each emotion. Schools were excluded from further analysis when they had fewer than five respondents. Ten schools were selected. (See Table 3 for an overview of the schools participating in the qualitative analysis, with the highest means (intercepts) for each primary emotion category shown in bold font.)

The software package Nvivo10 was used to analyse the qualitative data, and a thematic approach was applied (Braun & Clarke, 2006). First, all transcripts were read in an active way (searching for patterns and interesting ideas). Second, meaningful units in the transcribed interviews were generated. In a third step, codes were collated into themes and sub-themes. In the fourth step, after a review of the themes' suitability for the data set, the themes were refined. As the fifth step, a final code tree was constructed, which represented the data as a whole. In the final step, the report was produced. To ensure the reliability of the coding, a second researcher independently recoded 30% of the data during the analysis, resulting in a Cohen's kappa of 0.74, thus representing 96.6% agreement (Sim & Wright, 2005).

## 4. Results

In this section, we first discuss the results of the multilevel analyses that address teachers' affective responses at different moments during the school inspection visit (RQ 1). We then describe teachers' cognitive responses that are associated with the presence of joy, surprise, anger, sadness and fear during these different moments (RQ2).

**Table 3.** Intercept of the schools participating in the qualitative analysis

| School | N | Joy | | | Surprise | | | Anger | | | Sadness | | | Fear | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | M1 | M2 | M3 | M1 | M2 | M3 | M1 | M2 | M3 | M1 | M2 | M3 | M1 | M2 | M3 |
| **A** | 6 | -0.437 | -0.686 | 0.001 | 0.162 | 0.314 | **0.631** | 0.280 | **1.036** | **0.659** | 0.426 | **1.524** | **0.506** | 0.247 | **0.486** | -0.028 |
| **B** | 7 | 0.113 | **0.744** | 0.621 | 0.117 | 0.355 | **0.562** | 0.002 | -0.132 | 0.337 | 0.013 | -0.033 | **0.295** | **0.286** | 0.141 | -0.007 |
| **C** | 14 | 0.119 | 0.364 | **0.739** | 0.210 | 0.022 | -0.079 | -0.091 | -0.250 | -0.285 | -0.036 | -0.108 | -0.097 | 0.118 | 0.107 | -0.002 |
| **D** | 9 | -0.027 | -0.178 | 0.646 | -0.031 | -0.133 | -0.146 | 0.183 | **1.040** | -0.369 | 0.050 | 0.276 | -0.037 | 0.157 | **0.270** | -0.005 |
| **E** | 7 | 0.362 | **0.676** | **0.863** | **0.406** | **0.492** | **0.756** | -0.054 | -0.056 | -0.287 | -0.039 | -0.117 | -0.081 | -0.016 | -0.000 | -0.018 |
| **F** | 7 | -0.102 | 0.222 | 0.480 | **0.417** | 0.184 | 0.016 | -0.061 | -0.168 | -0.235 | -0.035 | -0.104 | -0.076 | -0.213 | -0.194 | -0.009 |
| **G** | 14 | 0.596 | **0.684** | 0.479 | **0.511** | 0.047 | 0.274 | -0.087 | -0.182 | -0.205 | -0.038 | -0.104 | -0.093 | -0.062 | -0.100 | -0.016 |
| **H** | 9 | -0.147 | -0.456 | -1.509 | -0.399 | -0.326 | -0.483 | 0.120 | **0.431** | **1.030** | 0.149 | **0.335** | **0.446** | 0.070 | **0.148** | 0.069 |
| **I** | 7 | -0.551 | -0.296 | **0.701** | 0.066 | 0.148 | 0.311 | 0.115 | **0.551** | -0.231 | 0.071 | **0.354** | -0.025 | **0.285** | **0.486** | -0.028 |
| **J** | 5 | -0.350 | -1.137 | -1.788 | -0.268 | -0.295 | -0.503 | 0.117 | **0.457** | 0.256 | 0.104 | **0.311** | 0.239 | -0.018 | -0.046 | -0.007 |

**Table 4.** Estimates of fixed effects

| | Joy | | Surprise | | Anger | | Sadness | | Fear | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **Paramet** | SE | **Paramet** | SE | **Paramet** | SE | **Paramet** | SE | **Paramet** | SE |
| **Introductory meeting (M1)** | | | | | | | | | | |
| **Fixed effects** | | | | | | | | | | |
| Intercept | 2.707*** | 0.084 | 1.951*** | 0.094 | 1.266*** | 0.047 | 1.049*** | 0.025 | 1.590*** | 0.064 |
| **Variance estimates** | | | | | | | | | | |
| Between-school | 0.381 | | 0.385 | | 0.137 | | 0.098 | | 0.228 | |
| Between-teachers | 0.859 | | 1.046 | | 0.644 | | 0.291 | | 0.789 | |
| ICC | 0.307 | | 0.269 | | 0.175 | | 0.252 | | 0.224 | |
| **Conversation with inspector (M2)** | | | | | | | | | | |
| **Fixed effects** | | | | | | | | | | |
| Intercept | 3.124*** | 0.113 | 2.130*** | 0.092 | 1.405*** | 0.083 | 1.156*** | 0.061 | 1.408*** | 0.065 |
| **Variance estimates** | | | | | | | | | | |
| Between-school | 0.587 | | 0.347 | | 0.424 | | 0.328 | | 0.243 | |
| Between-teachers | 0.976 | | 1.118 | | 0.711 | | 0.460 | | 0.790 | |
| ICC | 0.376 | | 0.237 | | 0.374 | | 0.411 | | 0.235 | |
| **Announcement of the inspection outcome (M3)** | | | | | | | | | | |
| **Fixed effects** | | | | | | | | | | |
| Intercept | 3.879*** | 0.142 | 2.372*** | 0.114 | 1.387*** | 0.087 | 1.123*** | 0.039 | 1.074*** | 0.028 |
| **Variance estimates** | | | | | | | | | | |
| Between-school | 0.850 | | 0.509 | | 0.474 | | 0.190 | | 0.069 | |
| Between-teachers | 0.771 | | 1.270 | | 0.678 | | 0.387 | | 0.426 | |
| ICC | 0.524 | | 0.286 | | 0.411 | | 0.329 | | 0.139 | |

Note: Answer categories: (I experienced this emotion) 1= not at all; 2= to some extent; 3= to a moderate extent; 4= to a great extent; 5= to a very great extent

Note: (***) significant at p< .001-level.

### 4.1 Teachers' emotions during a school inspection visit

Table 4 provides an overview of the estimates of fixed effects. In general, the highest mean scores were found for joy ($Joy_{M1}$ = 2.71; $Joy_{M2}$ = 3.12, $Joy_{M3}$ = 3.88). Respondents experienced joy to a moderate—and even great—extent during the introductory meeting (M1), the inspection meeting (M2) and the announcement of the inspection outcome (M3), while surprise was experienced marginally during these moments ($Surprise_{M1}$ = 1.95, $Surprise_{M2}$ = 2.13, $Surprise_{M3}$ = 2.37). This is in contrast to the mean scores for fear ($Fear_{M1}$ = 1.59, $Fear_{M2}$ = 1.41, $Fear_{M3}$ = 1.07), which decreases remarkably during the inspection process and was experienced only marginally during the first two moments. Anger ($Anger_{M1}$ = 1.27, $Anger_{M2}$ = 1.41, $Anger_{M3}$ = 1.39) and sadness ($Sadness_{M1}$ = 1.05, $Sadness_{M2}$ = 1.16, $Sadness_{M3}$ = 1.12) were almost non-experienced.

Regarding the between-teacher variance, Table 4 shows that the between-teacher variance is the largest for respondents' reporting of surprise (between-teacher variance differs from $\sigma^2_{M1}$ = 1.05 to $\sigma^2_{M3}$ = 1.27), followed by joy ($\sigma^2_{M1}$ = 0.86, $\sigma^2_{M2}$ = 0.98). For most of the emotions, the between-teacher variance is the largest when respondents describe their affective responses regarding their conversation with the inspector. (For example, the between-teacher variance of joy is $\sigma^2_{M2}$ = 0.98 and $\sigma^2_{M3}$ = 0.77). Similar results were found for the between-teacher variances of anger and sadness with regard to respondents' conversation with the inspection team (respectively $\sigma^2_{M2}$ = 0.71 and $\sigma^2_{M2}$ = 0.46).

Notably, the results also indicated that the affective responses on the teacher level varied more than teachers' affective responses on the school level. In other words, the variation in affective responses is attributed more so to individual teachers' characteristics rather than to school membership. This supports the idea that teachers appraise school inspections differently and that their emotions occur as a result of the interpretations of the inspection rather than as a result of the inspection visit itself. A closer look at the results (as presented in Figure 1 and 2) shows the variety in the development of teachers' affective responses in each of the schools (each line represents the mean scores for a single school unit during M1, M2 and M3, as shown in Figure 1).

Whereas the figures above show that most schools had similar findings for surprise and fear, larger differences between schools were found for joy, anger and sadness with regard to teachers' conversation with inspectors and the announcement of the inspection outcome. Between-school variance is the largest for schools' reporting joy (between $\sigma^2_{M1}$ = 0.38 and $\sigma^2_{M3}$ = 0.85). Our results show that schools differ mostly in their experience of joy and surprise regarding the

announcement of the inspection outcome (respectively $\sigma^2_{M3} = 0.85$ and $\sigma^2_{M3} = 0.51$). This is also the case for anger, although the between-school variances of anger and sadness are already larger with regard to teachers' conversations with the inspectors compared to the parameters for the introductory meeting (e.g. anger: $\sigma^2_{M1} = 0.14$ and $\sigma^2_{M2} = 0.48$). The between-school variance of fear decreases from the introductory meeting ($\sigma^2_{M1} = 0.23$) to the final outcome ($\sigma^2_{M3} = 0.07$).

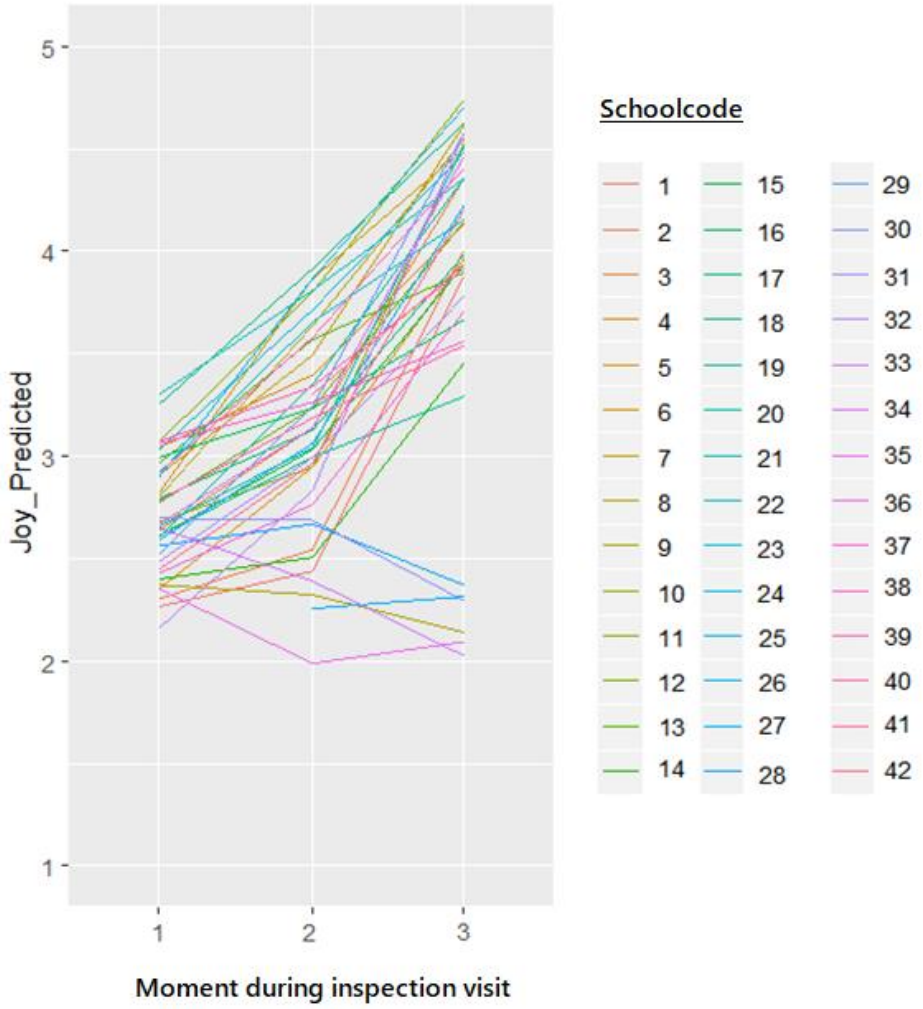


**Figure 1.** Predicted scores for joy

Whereas the figures above show that most schools had similar findings for surprise and fear, larger differences between schools were found for joy, anger and sadness with regard to teachers' conversation with inspectors and the announcement of the inspection outcome. Between-school variance is the largest for schools' reporting joy (between $\sigma^2_{M1} = 0.38$ and $\sigma^2_{M3} = 0.85$). Our results show that schools differ mostly in their experience of joy and surprise regarding the announcement of the inspection outcome (respectively $\sigma^2_{M3} = 0.85$ and $\sigma^2_{M3} = 0.51$). This is also the case for anger, although the between-school variances of anger and sadness are already larger

with regard to teachers' conversations with the inspectors compared to the parameters for the introductory meeting (e.g. anger: $\sigma^2_{M1} = 0.14$ and $\sigma^2_{M2} = 0.48$). The between-school variance of fear decreases from the introductory meeting ($\sigma^2_{M1} = 0.23$) to the final outcome ($\sigma^2_{M3} = 0.07$).

## 4.2 Teachers' cognitive responses in experiencing emotions

### 4.2.1 Teachers' cognitive responses when reporting joy

Five schools (schools B, C, E, G and I) score higher than average on the experience of joy regarding the inspection visit. According to the teachers in the selected schools, the school inspectors provided a satisfactory environment during the introductory meeting. The teachers indicated they felt relieved when inspectors informed them about the inspection procedure and objectives.

Most teachers reflected on the inspectors' positive attitude and communication style during the conversations. In schools where inspectors are perceived as warm, friendly and open, teachers reported emotions of satisfaction and relief (schools B, C, E and G). When the inspectors recognised teachers' accomplishments in teaching and learning practices, teachers expressed satisfaction and pride (schools B, C and E).

> *"We were very relieved and happy with the final (positive) outcome. It's a confirmation of what we fully believe in as a school."* (teacher 151, school C)

In general, emotions of joy were related to teachers' willingness to respond to inspection feedback. Though the emotions of joy (satisfaction, pride and relief) were associated with a positive inspection outcome, teachers associated emotions of satisfaction with clear and constructive feedback (schools B and D). Teachers also responded with satisfaction when negative inspection feedback was perceived as accurate.

### 4.2.2 Teachers' cognitive responses when reporting surprise

In schools A, B, E, F and G, the scores related to surprise were above average. Teachers in these schools only reflected on their experience of surprise regarding the inspection outcome and not regarding the introductory meeting. Based on the few citations available, we presumed that unexpected positive inspection outcomes characterise the presence of surprise at the moment of the final outcome.

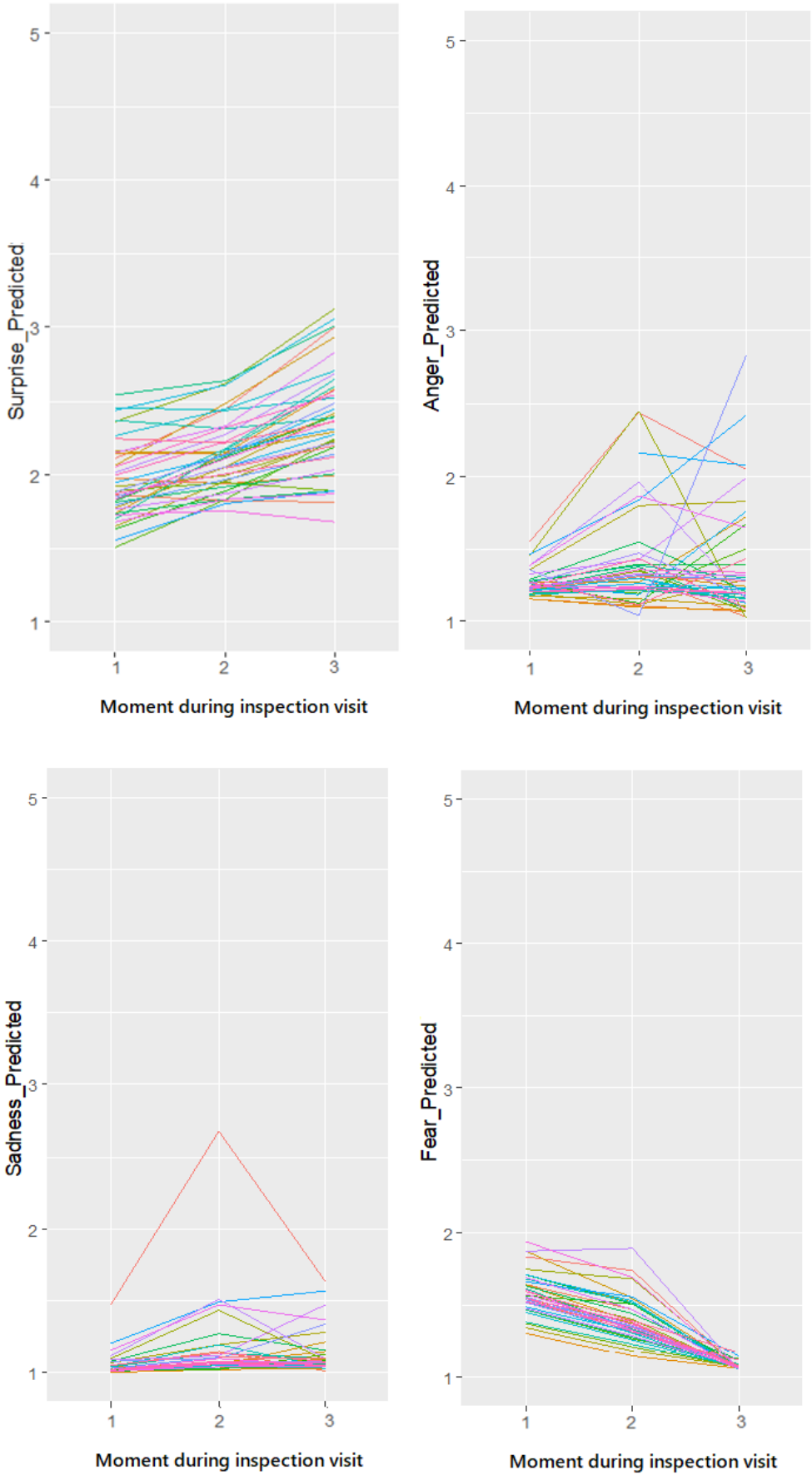


**Figure 2.** Predicted scores for surprise, anger, sadness, and fear

*"We've got two excellent domains, and the other ones were very good too. There was one area for improvement that has already been addressed. Wouldn't you be satisfied and surprised then?"* (teacher 190, school E)

Teachers in school A described a negative relationship between the school staff and the inspectors during the audit. Teachers reported disrespectful and rude inspector behaviour toward them. Although the inspectors became friendlier at the end of the audit, the teachers doubted the possibility of a positive outcome and were thus surprised by the unexpected positive result. In schools B, E and G, the positive inspection outcome was in line with the teachers' expectations, but the absence of more substantial suggestions for improvement took many teachers by surprise.

### 4.2.3 Teachers' cognitive responses when experiencing anger

Against expectations, almost every school with higher self-reported anger received a positive inspection outcome (schools A, D, I and J). Only school H was characterised by a negative inspection outcome for educational quality.

Inspectors' negative attitude and behaviour—unfriendly, brutal and overly critical behaviour towards teachers, pupils and even parents—were frequently cited as the main source of teachers' anger and frustration in schools A, H and I. The inspector's limited understanding of how the school organisation deviated from what was stated on paper due to the large class sizes (up to 28 toddlers) evoked frustration as well (school J).

In schools A, H and I, teachers attempted to defend themselves and protect their ideas, as they felt personally attacked by the inspection team. Under these circumstances, teachers pointed to the mismatch between the inspectors' negative communication style and the positive inspection outcome at the end of the process.

*"I don't understand why [they made] so many people cry that week, including myself, just to say that we are doing well afterwards."* (teacher 214, school M)

### 4.2.4 Teachers' cognitive responses when experiencing sadness

Schools A, B, H, I and J had the highest scores for sadness. Similar to the experience of anger, teachers referred to the inspectors' negative behaviour and poor communication skills as sources of disappointment when their conversations with inspectors lacked depth and evoked unwarranted negative expectations (schools A and I).

Negative feedback that seems unjustified also results in disappointment. In school H, teachers had cleaned the classrooms in advance of the inspection visit, which resulted in a remark about the absence of didactic material in the classroom. In addition, the absence of further guidelines or strategies on the school level to deal with the shortcomings intensified teachers' disappointment (school J).

> *"Their improvement comments are justified, but the steps to a successful improvement process are not crystal clear."* (teacher 180, school J)

Despite a positive outcome on educational quality, the negative outcome for school B's habitability, safety and hygiene resulted in disappointed teaching staff. Teachers referred to the school board's negligence as the main cause for these deficits.

> *"We exceed expectations in various areas. Due to the negligence of the chairman of the school board, we receive unfavourable advice. This is really disappointing."* (teacher 146, school B)

### 4.2.5 Teachers' cognitive responses when experiencing fear

The highest scores for fear were found in schools A, B, D, H and I. Regarding the introductory meeting, teachers referred to nervousness, an affective aspect of fear. Teachers stated that the actual start of the visit (schools B and I) and the unknown aspects of the new inspection approach caused high levels of fear (schools A and B). This was also the case for non-experienced teachers who had their first inspection visit (school A).

Additionally, teachers related fear to feelings of uncertainty about their teaching competences, especially with regard to the classroom observation (schools B, H and I). The thought of not being able to answer the inspectors' questions during the conversations with inspectors also induced fear (school D). One teacher revealed her fear of disappointing colleagues during the inspection conversations:

> *"I was involved in school policy conversations and for that I was very nervous, I did not want to disappoint anyone."* (teacher 149, school B)

## 5. Conclusion and discussion

In this study, we examined the intensity and key moments of teachers' emotions with regard to the introductory meeting, teachers' conversation with the inspectors and the final inspection outcome, reporting findings from multilevel models. By analysing open-ended questions, the

study contributes to a better understanding of the quantitative differences in teachers' emotions and of how teachers' emotions are associated with teachers' cognitive responses to the inspection visit.

Regarding the first research question, we found that teachers reported joy, followed by surprise, as their most frequently experienced emotion with regard to all three moments during an inspection visit. This is in contrast to the experience of fear, which was marginally reported for the introductory meeting and the inspection meeting. In contrast to the evidence collected in earlier school inspection research, anger and sadness were almost non-existent (see also Penninckx and Vanhoof, 2015). These findings add more insight to the discussion on the dominant presence of negative emotions in inspection research (Penninckx & Vanhoof, 2015).

The strong focus on development and the relatively low-stakes context that characterises the Flemish inspection approach, compared to the high-stakes context in which most studies have been conducted, may explain these positive results (Van Bruggen, 2010). This viewpoint underscores the potential role that school inspectors can play as facilitators of effective pedagogical practices rather than their main purpose of holding schools and teachers accountable for student improvement. This study also demonstrates that teachers' experience of joy and surprise appear to be no less important than the experience of anger, sadness or fear in inspection research. To capture the full range of emotions that teachers experience with regard to school inspections, future research on emotional side effects of school inspections should examine a more extensive set of emotions than staying focused on teacher anxiety and stress.

Data also indicated that the affective responses on the teacher level varied more than teachers' affective responses on the school level. These results echo the claim of appraisal theorists (e.g. Frijda, 1993; Lazarus, 1991) who support the idea that different perceptions of events cause different appraisals and thus different emotions in individual people. The qualitative analysis of the open questions illustrated the potential benefits of this mixed method study and indicated indeed that teachers' cognitive responses towards the different moments of the school inspection visit explain these differences largely.

According to the qualitative analysis, a positive inspection outcome does not ensure teachers' experiencing of solely positive emotions, such as joy. The attitude, behaviour and communication style of school inspectors is crucial in teachers' affective responses towards a school inspection visit. Although McNamara and O'Hara (2006) had previously reported that

inspectors' respect and friendliness towards teachers serve as anxiety-relieving factors and are known to promote the acceptance of inspection feedback (Quintelier et al., 2018), they were not yet determined as joy-exciting stimuli during an inspection visit. In line with Dean's (1995) study, a positive perception of the inspectors during the introductory meeting reduces fear (relieves the 'fear of the unknown'). This initial contact with inspectors is of the utmost importance for teachers, as the inspectors can provide details about their objectives, scope and evaluation criteria in the beginning of the audit phase. This transparency fosters a sense of trust and understanding between teachers and inspectors (Ehren, 2016).

On a more negative note, although our quantitative data analysis revealed almost no experience of anger and sadness, teachers do largely associate their experience of frustration, annoyance and disappointment with school inspectors' negative attitude and poor communication skills during interactions with colleagues, pupils and parents. This is in line with the results of other studies, which also reported increased stress and anxiety among the school staff as a result of the inspectors' attitude (see Penninckx & Vanhoof, 2015). Additionally, teachers demand more support to implement inspection feedback, as the lack of support is also a cause of frustration. This finding relates to the question regarding whether teachers' emotions and cognitive responses have an impact on their acceptance and use of inspection feedback. Previous research has considered the role of emotions and cognition for learning, motivation and feedback acceptance (e.g. Brett & Atwater, 2001). In the school inspection context, this interplay has remained largely unexplored and may need further investigation to prove. Also, instead of exploring what factors influence teachers' affective and cognitive responses, it may be interesting to explore how these responses impact on teachers' classroom behaviour too.

Some limitations should be considered when interpreting the present results and in designing future research. First, although self-reporting is a primary method to assess emotions, the use of self-report questionnaires to examine teachers' emotions enhances the possibility of eliciting socially desirable responses (Pekrun, 2016). To decrease teachers' tendency to give socially desirable answers, we emphasised the confidentially and anonymity of the responses. Next, to decrease response drop out, we composed a survey that was short and easy to fill out. Although studies examining situationally induced emotions have used single items to measure emotions (Gross & Levenson, 1993), single item measures are more likely to contain error variance and may not accurately capture a respondent's emotion because the individual may interpret the item differently at that moment (Harmon-Jones et al., 2016). When time is available, a multiple-item questionnaire should be used if possible. Nonresponse remains a problem for open-ended

questions, as this only attracts respondents who are motivated to respond. It should be noted that more data were missing for the open-ended responses than for the quantitative measures. Therefore, conclusions and generalisations have to be drawn carefully. Also, although the moment of measurement was kept as short as possible, the retrospective character of the study has his limitations. Since recall-based ratings of emotions are filtered through memory, the issue of memory distortion has to be acknowledged. Although studies indicate that retrospective ratings of emotions contain accurate information about momentary emotions (Barrett, 2007), future researchers need to study teachers' emotions and the flow of these emotions during the inspection visit itself. Emotions measures (physiological recording devices and video records) obtained concurrently with emotion experience maximise validity and accuracy. Finally, the empirical evidence provided in this study is restricted to schools that have received a favourable opinion. In order to get a more comprehensive understanding of the nature of teachers' emotions and associated perceptions, future research will need to come up with strategies for attracting schools with an unfavourable inspection outcome.

The findings of this study can contribute to the public and political debate on education reform, more specifically on new accountability measures. With a focus on school improvement, the relationship between teachers' emotions and cognitive responses regarding school inspection visits as well as their influence on teachers' acceptance and use of inspection feedback deserves further analysis. As emotions are an underlying reality in teachers' lives (Hargreaves, 2000), learning how to increase teachers' positive affective responses and diminish the negative ones during a school inspection visit can have far-reaching implications: it can not only motivate teachers to improve their classroom practices, but can also create a healthier and more productive evaluation climate in schools.

# STUDY 3

# *Determinants of Teachers' Feedback Acceptance during a School Inspection Visit*

**THIS CHAPTER IS BASED ON**

*Quintelier, A., De Maeyer, S., & Vanhoof, J. (Submitted). Determinants of Teachers' Feedback Acceptance during a School Inspection Visit.*

**ABSTRACT** *Educational stakeholders generally assume that inspection feedback directly contributes to school improvement through the mechanism of feedback acceptance. Feedback research in general distinguishes between cognitive and affective responses as significant factors for feedback acceptance, but it also focuses on cognitive responses as antecedents of emotions and emphasises the interplay between cognition, emotions, and feedback acceptance. Quantitative evidence in external school evaluation research to support this view, however, is rather scarce. This study draws on quantitative data collected from 687 teachers in 80 Flemish primary schools that had recently been inspected. Using path analysis, we investigated the existence and strength of relationships between teachers' cognitive and affective responses and teachers' feedback acceptance. The analysis revealed that anger and feedback acceptance are predominantly explained by the perceived fairness of the evaluation process and outcome but that they are also explained by the perceived relevance of the provided feedback.*

## 1. Introduction

In Europe, the use of school inspections to assess and hold schools accountable for goals related to student achievement and educational quality is well established. Some educational stakeholders also consider an inspection as a tool for improvement of quality and improvement of students' learning and achievement (Ehren et al., 2013). To stimulate school improvement, inspectors assess schools in accordance with a set of preconceived standards and give feedback on the schools' strengths and weaknesses during the school visits and in inspection reports (Ehren, 2016). Schools are supposed to accept this feedback and eliminate their shortcomings (Coe, 2002). Overall results of research on whether school inspections contribute to school development purposes, however, are far from conclusive (Husfeldt, 2011).

Although theories on schools as learning organisations and school improvement support the role of performance feedback in effecting change (Hattie & Timperley, 2007), feedback is only expected to represent an improvement tool for schools when it is understood, accepted, and eventually used by actors in schools. This is in line with the feedback process model of Ilgen et al. (1979), which suggests that the core mechanism of the feedback process is acceptance of feedback. Even when feedback is highly beneficial for an organisation, it can be useless if the organisation's stakeholders do not accept it (Ilgen et al., 1979). From this viewpoint, teachers' feedback acceptance is required for them to support school improvement plans, to understand the benefits of innovations, and to feel secure in their role as implementers of particular actions

(Leithwood, 2000). Nevertheless, feedback recipients do not always accept feedback. Research relates feedback acceptance to two concepts, namely feedback recipients' cognitive and affective responses (Ilgen et al., 1979; Sander, 2013).

Cognitive responses to feedback are defined as the recipient's perceptions (or thoughts) regarding source credibility (expertise and trustworthiness), feedback fairness (distributive and procedural justice), and features of feedback (feedback sign, constructiveness, clarity, and relevance) (e.g. Ilgen et al., 1979; Brinko, 1993).

Of these cognitive responses, school inspectors' credibility has received the most research attention. Although most researchers assume a positive relationship between a positive inspector attitude and school development (e.g. Chapman, 2002; MacBeath, 2006; Weiner, 2002), few studies support this hypothesis (Lowe, 1998; Ofsted, 2007). Penninckx et al. (2016) concluded that inspection quality is the strongest predictor of conceptual and instrumental inspection effects but did not further specify which component (the quality of the inspector's behaviour, the inspection's psychometric quality, and/or the transparency of the inspection) is the strongest determining predictor. In addition, Behnke and Steins (2017) showed that feedback quality is one of the key factors influencing the effect of inspections on principals. However, they did not specify which feedback characteristics contribute to perceptions of high-quality feedback, nor did they take into account teacher reactions to feedback. These examples address the need for a comprehensive view of the role that teachers' cognitive responses to the inspection process play in the acceptance of inspection feedback.

A second mechanism that can explain teachers' feedback acceptance is their emotional responses to inspection feedback. Non-educational research suggests that emotions such as anger can negatively influence how individuals receive and process feedback (e.g. Brett & Atwater, 2001). Nevertheless, to date, there has been little research investigating the role of teachers' affective responses in the acceptance of school inspection feedback. A recent qualitative study focused on the role of cognitive responses as antecedents of teachers' emotions during school inspection visits (Quintelier, Vanhoof, & Quintelier, 2018). Data indicated that teachers associate their experiences of frustration, annoyance, and disappointment with school inspectors' negative attitudes and poor communication skills. A positive attitude among school inspectors was found to be crucial in teachers' experiences of joy. In addition, the study indicated that teachers' affective responses vary more at the individual teacher level than the school level. These results support the view of appraisal theorists, who also focus on cognitive responses as antecedents of emotional reactions and emphasise the interplay between emotions and

cognition. In line with appraisal theorists (e.g. Frijda, 1993; Lazarus, 1991; Roseman & Smith, 2001), Sander (2013) determined that evaluations (appraisals) of situations and events, rather than the events themselves, elicit emotions. Differences in these evaluations occur due to individuals' cognitive responses, which depend on individuals' beliefs and past experiences. Relatively little is known, however, about the extent to which emotions mediate the relationship between cognitive responses (perceptions) and inspection feedback acceptance. In the present study, we therefore examined the extent to which teachers' cognitive responses regarding inspection feedback are related to feedback acceptance and the extent to which this feedback acceptance is mediated by teachers' affective responses.

Based on these considerations, the aims of this study were twofold. First, the findings of previous studies suggest a link between teachers' cognitive responses and their acceptance of inspection feedback. To date, however, quantitative evidence to support this view is rather scarce. Given that feedback has a strong influence on teachers and the improvement of their teaching practice (OECD, 2013), we examined how inspection feedback can enhance teachers' feedback acceptance. Second, we aimed to extend previous research by incorporating cognitive and affective responses to feedback within the feedback process model. Although most of the research to date has provided no direct evidence for affective responses as possible mediators of the relationship between cognitive responses and feedback acceptance, the importance of both cognitive and affective factors in the feedback process has been acknowledged by multiple scholars (e.g. Brett & Atwater, 2001; Ilgen et al., 1979). Since researchers have uncovered evidence of teachers' emotions as precursors of students' learning and achievement (Pekrun & Linnenbrink-Garcia, 2014; Schutz & Pekrun, 2007), identification of factors influencing these emotions could expand the current understanding of how school inspections can drive school improvement.

Previous research is discussed in the next section. We build on this literature review to develop a research model for our study (see Figure 1) and to formulate the research questions. Given our aim of studying the relationships between cognitive responses, affective responses, and feedback acceptance, we begin by discussing our conceptualisation of these concepts.

## 2. Conceptual framework

### 2.1 Cognitive responses

As previously stated, three main groups of recipients' cognitive responses (thoughts) to feedback have been widely discussed as significant factors influencing feedback acceptance in

organisational psychology: (1) source credibility (source's expertise and trustworthiness), (2) perceived violations of procedural and distributive justice (organisational justice), and (3) feedback characteristics (feedback sign, constructiveness, clarity, relevance) (e.g. Brett & Atwater 2001; Greller & Herold, 1975; Ilgen et al., 1979; Leung et al., 2001). A definition and overview of each variable, alongside evidence from other educational and non-educational contexts, is included in Table 1.

The current study focused on determining the extent to which the different cognitive responses (expertise, trustworthiness, procedural justice, distributive justice, feedback constructiveness, feedback clarity, and feedback relevance) contribute independently to the prediction of teachers' affective responses and their feedback acceptance.

## 2.2 Affective responses

### 2.2.1 Conceptualisation and classification of teachers' emotions

In line with appraisal theorists (e.g. Frijda, 1993; Lazarus, 1991; Roseman & Smith, 2001), Sander (2013) suggests that evaluations (appraisals) of situations and events, rather than the events themselves, elicit emotions (affective responses). Differences in these evaluations occur due to individuals' cognitive responses, which depend on individuals' beliefs and past experiences. For example, according to most appraisal theorists, happiness/joy involves the attainment of a goal, while anger usually involves negative behaviour towards the person (or the object) that is deemed responsible for the unpleasant outcome (blaming). When a situation is evaluated as an irrevocable loss, emotions of sadness are more likely to occur (e.g. Scherer, 2005).

While most researchers of emotions (e.g. Sander, 2013; Sutton & Wheatley, 2003) distinguish between positive (happiness and joy) and negative emotions (fear, anger, and sadness), recent studies in the educational setting have explicitly referred to the emotion classification of Parrott (2001) (Bahia, Freire, Amaral, & Estrela, 2013; Chen, 2016). Parrott (2001) divided six primary emotions—that is, love, joy, surprise, anger, sadness, and fear—into secondary and tertiary emotions. These divisions contain additional emotions within each primary emotion group. Parrott identified over 100 emotions and provided a comprehensive overview of human emotions in which he also identified connections between varying emotions. This classification of emotions is used to analyse the emotions of teachers in this study.

**Table 1.** Conceptual framework of the current study: cognitive responses to feedback (1/2)

| Concept | Definition | Exemplary overview of findings from earlier research |
|---|---|---|
| ***Source credibility*** | | |
| **Expertise (knowledge)** | Expertise refers to the degree to which an inspector is perceived as capable of making accurate assertions. | When a feedback source is perceived as knowledgeable in an area or topic, individuals are more likely to accept his or her feedback. In the school inspection context, teachers are often reluctant to accept feedback from an inspector with a different academic background (Dean, 1995; Quintelier, Vanhoof, & Quintelier, 2018). |
| **Trustworthiness** | Trustworthiness represents the degree to which a teacher trusts an inspector's intentions and motives, free from biasing factors, at the time of feedback (adapted from Steelman & Rutkowski, 2004). | When inspectors are perceived as professional, collegial, and nonthreatening, teachers are more likely to accept negative inspection feedback (e.g. Erdem & Yaprak, 2013; Kelchtermans, 2007; McNamara & O'Hara, 2006). A positive relationship between school inspectors and teachers is assumed to increase feedback acceptance as a precursor to further improvement (Ehren & Visscher, 2008; Kogan & Maden 1999). |
| ***Organisational justice*** | | |
| **Procedural justice** | Procedural justice relates to the perceived fairness of the inspection process in which information was gathered to determine the outcomes (adapted from Colquitt, 2001). | Efforts to increase transparency strengthen schools' satisfaction with inspections (Wilcox & Gray, 1996). Although evidence remains rather limited, teachers are more likely to accept inspection feedback that is provided by inspectors who set clear expectations regarding educational quality and who are willing to engage in a professional dialogue (Gustafsson et al., 2015; Thomas et al., 2000). |

**Table 1.** Conceptual framework of the current study: cognitive responses to feedback (2/2)

| Concept | Definition | Exemplary overview of findings from earlier research |
|---|---|---|
| **Distributive justice** | Distributive justice is defined as the perceived fairness of the inspection outcome. | The validity and reliability of the inspection report are fundamental cornerstones for teachers, as they tend to reject negative feedback more easily when they consider it unfair (Kelchtermans, 2007). When teachers are aware of window dressing activities in schools with positive inspection outcomes, they report feelings of injustice and are less willing to accept negative inspection outcomes (Quintelier, Vanhoof, & Quintelier, 2018). |
| ***Characteristics of feedback content*** | | |
| **Feedback constructiveness** | Feedback constructiveness refers to the extent to which inspection feedback is perceived as elaborate and constructive. | Constructive criticism, feedback that includes feed forward (e.g. improvement suggestions for remedying poor performance), occasions reactions that are less negative than the reactions engendered by destructive criticism (Hattie & Timperley, 2007; Ehren & Visscher, 2008). Despite teachers' preference for constructive, practical feedback, many inspectorates are not allowed to give improvement suggestions to schools and teachers (Penninckx et al., 2016). |
| **Feedback clarity** | Feedback clarity refers to the extent to which the feedback message is perceived as straightforward and direct, as opposed to ambiguous and open to interpretation (Geddes & Linnehan, 1996). | Research emphasises the importance of understandable feedback (Wiggins, 2012). Although evidence in inspection research remains rather limited, vague descriptions of problematic shortcomings can leave feedback recipients poorly informed about the current situation and can promote feedback rejection (Audia & Locke, 2004). |
| **Feedback relevance** | Feedback relevance represents teachers' perceptions of information significance. | Teachers accept inspection feedback more easily and are more likely to change their behaviour when the feedback content is relevant to them and consistent with their goals and expectations (Dobbelaer et al., 2017; Ehren & Visscher, 2008). |

### 2.2.2 Emotions in inspection research

While extensive research has been conducted on the emotions induced by inspection (see Penninckx & Vanhoof, 2015 for a review), three concerns must be considered in interpreting and using the results.

First, as Penninckx and Vanhoof (2015) concluded, in each of the reviewed studies, there is an emphasis on the negative emotional effects of a school inspection (anxiety and anger), while only a minority of studies mention emotions of satisfaction, relief, euphoria, and pride among teachers (McCrone et al., 2007; Ofsted, 2007). This raises the questions of whether school inspections elicit emotions of joy and happiness and whether the research community has neglected to report these emotions (Penninckx & Vanhoof, 2015). As an answer to the low visibility of positive emotions in inspection research, a recent study (Quintelier, Vanhoof, & Quintelier, 2019) examined the presence of teachers' emotions regarding inspection visits and found that teachers reported joy, followed by surprise, as their most frequently experienced emotion regarding the inspection outcome. Anger and sadness were seldom observed (Quintelier, Vanhoof, & Quintelier, 2019).

Second, stress and anxiety are the most frequently reported emotional side effects of a school inspection. Research evidence has shown that the main sources of the high levels of teacher and headteacher stress include the notification period (Brimblecombe & Ormston, 1995), classroom observation (e.g. MacBeath, 2006; Varnava & Koutsoulis, 2006; Wilcox & Gray, 1996), and (consequences of) a negative inspection outcome (e.g. Gärtner et al., 2009; Hopkins et al., 2016). Researchers' approach to measuring teachers' stress levels and how they are reported as emotional effects may result in a limited and oversimplified view of the experienced emotions. After all, findings from previous research have indicated that the experience of stress is often associated with negative emotions, such as depression, anxiety, and anger (Folkman, 2008; Lazarus, 2001). Therefore, this approach neglects the underlying affective responses that teachers experience to specific situations and events (Lazarus, 2001).

Third, while several authors have demonstrated the influence of the inspector's credibility and the inspection outcome on teachers' emotions (e.g. McNamara & O'Hara, 2006; Thomas et al., 2000), there is currently limited evidence revealing the extent to which these affective responses to feedback influence teachers' feedback acceptance. These examples stress the need for more detailed investigations of teachers' emotions and of the interplay between emotions and cognition in school inspection contexts.

## 2.3 Feedback acceptance

According to the feedback process model of Ilgen et al. (1979), an individual's reaction to feedback depends mostly on feedback acceptance. In this study, we define feedback acceptance as "perceptions about the accuracy of the inspection feedback received" (Anseel & Lievens, 2009). When the feedback is deemed an accurate representation of the individual's performance, he or she will be more likely to reply to the feedback (Anseel & Lievens, 2006; Ilgen et al., 1979).

Most inspectorates rely on positive relationships between inspectors and schools (for example, through joint observations of lessons in schools, personal invitations to respond to the inspection report, and feedback conferences with the school staff) to increase schools' acceptance of standards and feedback (Ehren et al., 2013). Considerable ambiguity remains, however, with regard to the assumption that feedback acceptance leads to school improvement. Previous research in the field of school inspection has reported that the extent to which inspection feedback is accepted influences the extent to which schools and teachers act upon it (Chapman, 2002; Gustafsson & Myrberg, 2011; McCrone et al., 2007), although feedback acceptance alone does not necessarily lead to quality improvement (Ehren et al., 2015). The transfer of inspection feedback to actions that enhance school improvement depends largely on the conditions and the culture of the different accountability systems (Ehren et al., 2015). Altrichter and Kemethofer (2015) found evidence that the acceptance of feedback fostered the improvement of self-evaluation practices in schools in Austria and Sweden but not in England. These examples illustrate that it is essential to assess the implications of school inspections across diverse contexts.

## 2.4 The current study

The results of our literature review suggest that both cognitive and affective responses to feedback seem to be essential for altering teachers' attitudes, perceptions, and behaviour. In addition to theory development, understanding how individuals receive and react to feedback can not only enhance its acceptance but also contribute to quality improvement in schools.

The main purpose of this study was to identify determinants of the acceptance of school inspection feedback at the teacher level. Based on a previous educational study (Quintelier, Vanhoof, & Quintelier, 2019), we included three primary categories of teachers' affective responses—joy, anger, and sadness—as possible predictors of teachers' feedback acceptance. In turn, we studied how these affective responses are influenced by different cognitive responses: inspectors' expertise, inspectors' trustworthiness, procedural justice, distributive justice,

feedback constructiveness, feedback clarity, and feedback relevance. Thus, we hypothesised that teachers' affective responses mediate the relationship between teachers' cognitive responses and feedback acceptance. An overview of our research model is provided in Figure 1.

The following research questions (RQ) were posed:

- *RQ1. How are teachers' affective responses related to their cognitive responses in the context of a school inspection?*

- *RQ2. Do affective responses mediate the relationship between teachers' cognitive responses and their feedback acceptance?*

## 3. Method

This article reports on a survey of teachers' perceptions regarding the above-mentioned aspects. Using path analysis, we tested the existence and strength of the relationships presented in the theoretical framework. Since this study was conducted in the Flemish primary education sector, we first provide an overview of the Flemish school inspection procedure.

### 3.1 Research context

In Flanders, every school is inspected once every 6 years; this constitutes the sole accountability measure for schools. Unlike the education system in many other countries, the Flemish education system has no central exams or national student tests (OECD, 2015b). The Flemish inspection system is generally perceived as a relatively low-stakes inspection context (Van Bruggen, 2010). An inspection generates a judgment on the school, which determines whether the school retains its recognition. There are two possible inspection outcomes: (a) a favourable opinion (with or without major shortcomings) and a school's retention of its recognition without a follow-up or (b) an unfavourable opinion, resulting in initiation of the withdrawal procedure of a school's recognition unless the school devises an improvement plan and obtains assistance from an external agency. To support quality improvement, suggestions for improvement are also addressed (Vlaams Ministerie van Onderwijs en Vorming, 2016).

### 3.2 Sample

The study sample included every Flemish primary school that was inspected between January and November 2018. Every school leader of these 247 inspected primary schools received a phone call, which was followed by an email informing them about the study. When school leaders agreed to participate, paper or online questionnaires (school leader's preference) were sent to

staff members in teaching positions in these schools. Data from a total of 80 schools were retained in this study, encompassing 687 teachers. With regard to the inspection outcomes, only schools who received a favourable opinion were willing to participate. This is the case with the vast majority of Flemish schools as only 6% of the inspected primary schools received a negative inspection outcome in 2018 (Onderwijsinspectie, 2019).

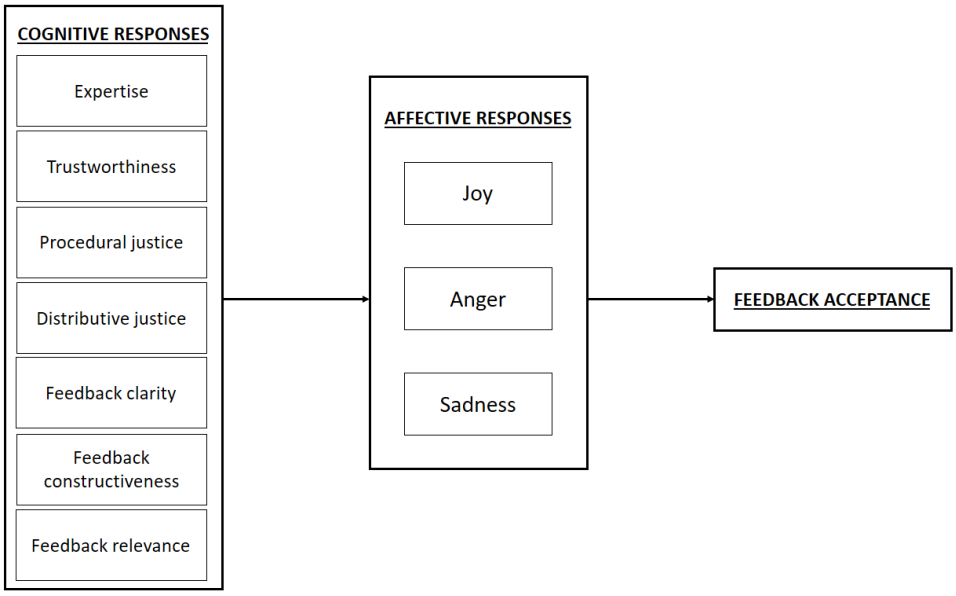


**Figure 1**. Research model with potential influencing factors for teachers' acceptance of feedback

Of those who participated in the survey, 33.0% of the respondents were from preschools, and 61.4% worked in primary schools. A total of 5.6% worked as preschool and primary teachers. The mean age of the respondents was 40 years old, and the age range spanned from 21 to 61 years of age. The mean of respondents' teaching experience at their current school was 14.3 years (experience range: 1–39 years of experience), while the respondents' mean overall teaching experience was 17.7 years. In this sample, 84.8% of the respondents are employed full-time as teachers; 15.24% of the respondents are employed part-time. Further, 87.5% of those who participated in the study are women, whereas only 12.5% are men. These figures indicate a relatively representative sample of the target population (Vlaamse Overheid, 2018).

The participants signed an informed consent form that stated the purpose and method of the study and the participants' rights. The study was approved by the ethics committee of the University of Antwerp.

### 3.3 Instruments

We collected data using self-report questionnaires. All items were in Dutch. Although some of the scales were adapted from existing instruments, the new context urged us to examine the psychometric qualities for this study.

To ensure the content validity of the questionnaire, we examined the extent to which the theoretical framework regarding individuals' feedback acceptance in organisational psychology and school inspection research was sufficiently elaborated upon in the survey (Cohen, Manion, & Morrison, 2011; Taherdoost, 2016). Therefore, a pilot version of the questionnaire was handed to four content experts (educational researchers in the organisational psychology and school inspection research). The feedback of the experts was implemented in a new questionnaire. This preliminary version of the questionnaire was then discussed with three teachers working at a recently inspected primary school (this school was excluded from further participation) to examine the difficulty level of the questionnaire and to understand whether the cognitive processes that the respondents were going through were in line with what the questionnaire intended to measure, indicating high content validity. The feedback gained from these discussions led to adaptations to the final questionnaire.

We tested the construct validity of the scales by conducting a confirmatory factor analysis (CFA) using software package lavaan in R (Rosseel, 2018). The fit indices that were taken into account to evaluate the validity of the instrument were the comparative fit index (CFI), the Tucker Lewis index (TLI), and the root mean square error of approximation (RMSEA). Hu and Bentler (1999) cut-off values were used as indications of a strong model fit: CFI and TLI values between 0.90 and 0.95 or greater, RMSEA values between 0.08 and 0.06 or below, and standardised root mean square residual (SRMR) values between 0.10 and 0.08 or below. We imputed missing data using the full information maximum likelihood method (FIML), as this technique performs well compared to other techniques for handling missing data (Enders & Bandalos, 2001). The models were refined based on modification indices. We used the factor scores created through CFA in the subsequent analyses (see section 3.4). An overview of the scales, the item examples, and Cronbach's alpha is presented in Table 2.

#### 3.3.1. Cognitive responses

School inspector credibility was measured using a 10-item bipolar scale, and each item was provided with a 7-step continuum for response: expertise and trustworthiness. This approach is consistent with earlier studies' use of bipolar scales to measure source credibility (e.g.

McCroskey & Teven, 1999). CFA revealed that, after the error-covariance between two items for expertise and between two items for trust was incorporated, the fit of the instrument was adequate (CFI=0.968; TLI=0.956; RMSEA=0.078).

**Table 2.** Psychometric characteristics of the different scales

| | Number of items | Min | Max | *M* | *SD* | Cronbach's alpha |
|---|---|---|---|---|---|---|
| **School inspector credibility** | | | | | | |
| **Expertise**<br>*In general, the inspector was unintelligent-intelligent* | 5 | 2.40 | 7.00 | 6.31 | 0.71 | 0.88 |
| **Trustworthiness**<br>*In general, the inspector was unreliable-reliable* | 5 | 1.40 | 7.00 | 6.10 | 0.96 | 0.87 |
| **Organisational justice** | | | | | | |
| **Procedural justice**<br>*I believe that the inspection process at our school progressed fairly* | 4 | 2.00 | 7.00 | 6.23 | 0.77 | 0.87 |
| **Distributive justice**<br>*The final inspection outcome reflects the school's efforts* | 4 | 1.00 | 7.00 | 6.11 | 1.00 | 0.89 |
| **Feedback characteristics** | | | | | | |
| **Feedback constructiveness**<br>*In general, the inspection feedback was reprimanding-constructive* | 3 | 1.00 | 7.00 | 5.69 | 1.08 | 0.89 |
| **Feedback clarity**<br>*In general, the inspection feedback was vague-clear* | 3 | 1.33 | 7.00 | 5.19 | 1.18 | 0.70 |
| **Feedback relevance**<br>*In general, the inspection feedback was irrelevant to me-relevant to me* | 3 | 2.33 | 7.00 | 5.80 | 0.92 | 0.78 |
| **Teachers' affective responses** | | | | | | |
| **Joy** | 3 | 1.00 | 5.00 | 4.05 | 1.02 | 0.88 |
| **Anger** | 3 | 1.00 | 5.00 | 1.19 | 0.53 | 0.80 |
| **Sadness** | 3 | 1.00 | 4.67 | 1.07 | 0.33 | 0.74 |
| **Teachers' acceptance of inspection feedback** | | | | | | |
| **Feedback acceptance**<br>*I generally find the feedback from the inspection accurate* | 4 | 1.00 | 7.00 | 5.98 | 0.91 | 0.78 |

We measured organisational justice using a 7-point Likert scale (1 = "entirely disagree", 7 = "entirely agree"). CFA indicated a good fit (CFI=0.990; TLI=0.986; RMSEA=0.053).

We measured the characteristics of school inspection feedback using a 9-item bipolar scale (7-step continuum for response): feedback constructiveness (3 items), feedback clarity (3 items), and feedback relevance (3 items). CFA revealed a satisfactory fit (CFI=0.996; TLI=0.953; RMSEA=0.066).

### 3.3.2. Teachers' affective responses

Teachers' affective responses to inspection feedback were measured using a scale where respondents were asked to describe the presence and intensity of emotions with regard to the inspection feedback they had received at the end of the inspection visit. Based on previous school inspection research and in line with Parrott's classification (2001), we used a 3-item scale to measure the primary emotion categories joy (satisfaction, relief, and pride), anger (anger, frustration, and annoyance), and sadness (hurt, humiliation, and dejection) (see Quintelier, Vanhoof, & Quintelier, 2019). Respondents were asked to rate the extent to which they had felt each of the above-mentioned emotions on 5-point scales (from 1 = "not at all" to 5 = "to a very great extent"). CFA revealed that the fit of the instrument was adequate (CFI=0.977; TLI=0.965; RMSEA=0.069).

### 3.3.3. Feedback acceptance

We measured the teachers' acceptance of inspection feedback using a 4-item scale adapted and translated from Tonidandel et al. (2002). Responses were made on a 7-point Likert scale (from 1 = "entirely disagree" to 7 = "entirely agree"). CFA revealed that the fit of the instrument was satisfactory (CFI=0.996; TLI=0.986; RMSEA=0.053).

## 3.4 Data analysis

First, we calculated the descriptive statistics and correlations for all variables. In order to further discover the data, we calculated Intra Class Correlations (ICC) as well as the variances between and within schools. ICC of the scales range from 0.11 to 0.46. To answer our research questions, we analysed the data by means of structural equation modelling (SEM), using software package lavaan in R (Rosseel, 2012). This technique allowed for modelling the direct and indirect relationships between the constructs in this study. Based on our theoretical framework, we built a path model with the three affective responses as mediators between teachers' cognitive responses and teachers' feedback acceptance, as demonstrated in our research model (see Figure 1).

Given the fact that we were analysing teachers within schools, the nested structure of the data was taken into account by the MLR estimator. This estimator considers the non-independence of observations and also possible non-normality of the data (Stapleton, McNeish, & Yang, 2016). Modification indices were examined to further optimise the model if the initial model did not fit the data.

## 4. Results

### 4.1 Descriptive results

The descriptive statistics of all the variables in the theoretical model are listed in Table 2. The averages of 6.31 for expertise and 6.10 for trustworthiness imply that teachers largely respond positively to the inspector's credibility in the context of a school inspection. Further, the results for procedural justice (*M*=6.23) indicate that teachers deem the inspection process fair and transparent. In addition, the average of 6.11 for distributive justice suggests that the teachers responded positively to the questions related to the perceived fairness of the final inspection outcome. The teachers responded with moderate positivity regarding the extent to which they perceived the feedback as constructive (*M*=5.69), clear (*M*=5.19), and relevant (*M*=5.80). The standard deviations illustrate that the differences between teachers are relatively high (*SD* between 0.92 and 1.18).

With regard to teachers' affective responses, we found that the mean score of joy (M=4.05) was higher than the mean scores for anger and sadness (M=1.19 and M=1.07, respectively). Finally, the participating teachers exhibited, on average, a moderately strong response to feedback acceptance (M=5.98). Analysis at item level reveals that teachers generally agree with the findings of the inspectors (M=5.95) and find the inspection feedback accurate (M=5.70).

### 4.2 Explanatory results

To get a first grasp on the relationships between the variables in the SEM-model, Pearson product-moment correlations among all constructs under study were calculated (Appendix, Table A). Subsequently, we tested our theoretical model (Figure 1) by means of SEM.

Given that all three fit indices for the initial model suggested a less than adequate fit (CFI=0.96; TLI=0.68; RMSEA=0.24; SRMR=0.12), we can conclude that this model did not fit the data. Examination of the modification indices suggested that the model could be improved by adding paths to the model. The next phase in the specification of our model comprised the inclusion of a direct path from distributive justice to feedback acceptance. This resulted in better, yet still

insufficient, fit indices. After we included a direct path from feedback relevance to feedback acceptance in the model, the model, as depicted in Figure 2, exhibited satisfactory fit statistics (CFI=0.99; TLI=0.97; RMSEA=0.02; SRMR=0.00). The standardised regression weights and significance levels of our model are depicted in Figure 2.

### 4.2.1 Teachers' cognitive responses as antecedents of affective responses

Regarding teachers' cognitive responses, the path model shows that perceptions of the inspectors' trustworthiness, distributive justice, and feedback relevance are strongly associated with joy, anger, and sadness. Interestingly, the path model revealed no statistically significant relationships between perceptions of the inspectors' expertise, procedural justice, feedback constructiveness, and teachers' emotions.

We found that positive perceptions of the inspectors' trustworthiness are negatively related to teachers' experiences of anger ($\beta$ = -.365, $p$<.05) and sadness ($\beta$ = -.477, $p$<.05). In other words, the more teachers trust school inspectors' motives, the less anger and sadness will be reported. Teachers' justice perceptions regarding the inspection outcome (distributive justice) are positively associated with teachers' experiences of joy ($\beta$ = .446, $p$<.0001) and negatively related to teachers' experiences of anger ($\beta$ = -.299, $p$<.001) and sadness ($\beta$ = -.199, $p$<.05). With regard to the feedback characteristics, we found that feedback clarity and feedback relevance are statistically significantly related to teachers' experiences of joy, anger, and sadness. Perceptions of clear feedback are, to a lesser extent, associated with teachers experiencing higher levels of joy ($\beta$ = .174, $p$<.05). Finally, the path model underscores the importance of feedback relevance in teachers' experiences of anger ($\beta$ = .296, $p$<.05) and sadness ($\beta$ = .395, $p$<.05).

### 4.2.2 Teachers' affective responses as mediators of the relationship between cognitive responses and feedback acceptance

Among the paths from teachers' affective responses to teachers' feedback acceptance, only the path from anger to feedback acceptance is statistically significant ($\beta$ = -.174, $p$<.01). The relationship between teachers' cognitive responses (inspectors' trustworthiness, distributive justice, and feedback relevance) and feedback acceptance is mediated by teachers' experience of anger, albeit to a very small extent. In other words, when teachers have negative perceptions regarding an inspector's trustworthiness and distributive justice, they are more likely to report anger and are less likely to accept the feedback. This is also the case for inspection feedback that is perceived as relevant. There are no statistically significant relationships between joy and feedback acceptance or between sadness and feedback acceptance.

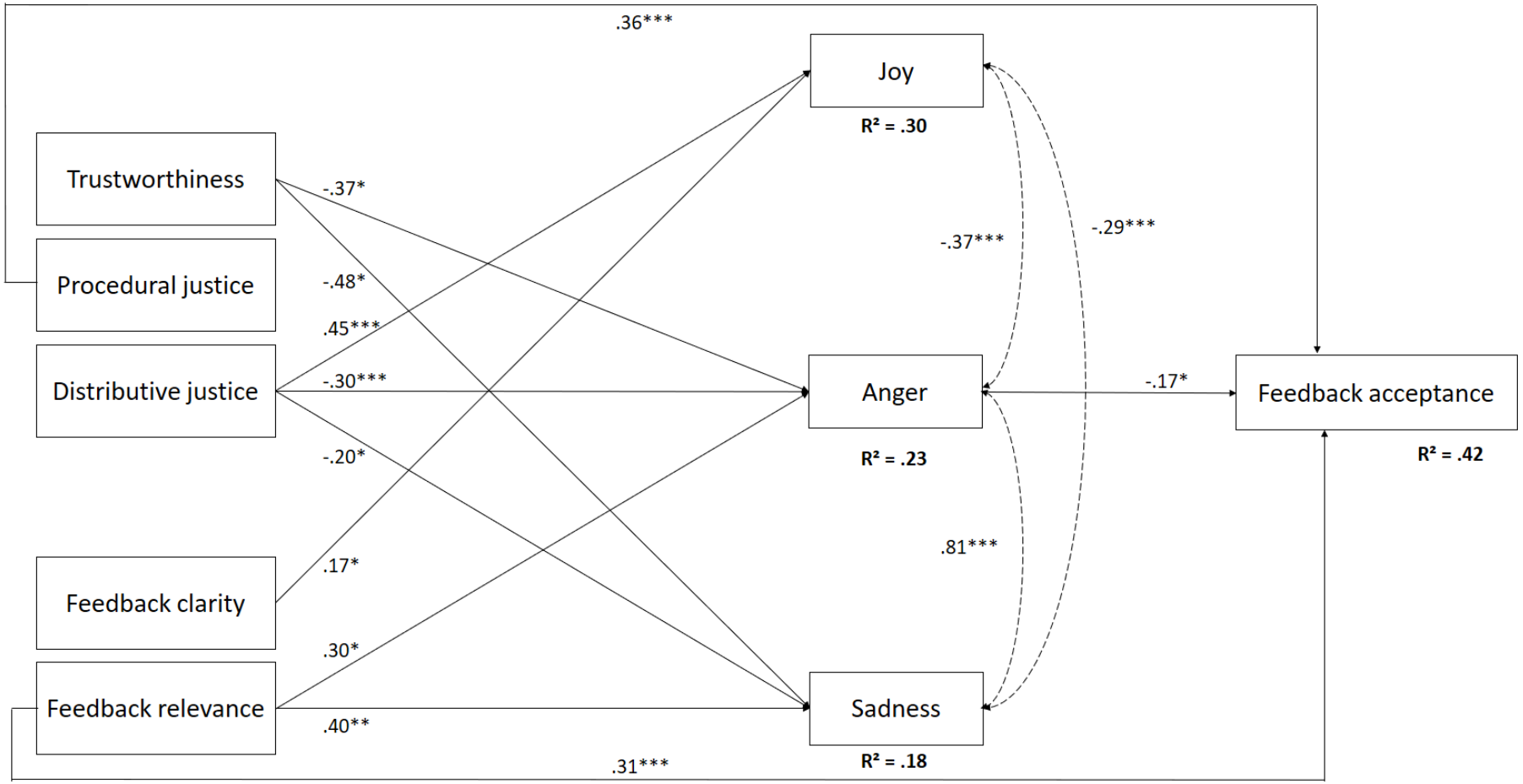


**Figure 2.** Path model with standardised parameter estimates (*$p$<.05, **$p$<.01,***$p$<.001)

### 4.2.3 Direct influences of teachers' cognitive responses on feedback acceptance

Evidence was found to substantiate the importance of teachers' positive perceptions regarding organisational justice and their relationship with feedback acceptance. Perceptions of procedural justice are directly associated with teachers' acceptance of school inspection feedback (respectively, $\beta = .357$, $p<.001$). Teachers who believe that the inspection process represented a fair and transparent evaluation report higher scores on feedback acceptance. With regard to feedback relevance, we found that teachers who perceived their inspection feedback as relevant tended to accept the inspection feedback more readily (direct effect $\beta = .306$, $p<.01$; total effect $\beta = .259$).

We uncovered no direct significant relationships between the remaining cognitive responses and teachers' acceptance of feedback. The total amount of explained variance for teachers' feedback acceptance was 44%. The explained variance for the affective responses joy, anger, and sadness were 31%, 23%, and 18%, respectively.

## 5. Conclusion and discussion

Although educational stakeholders generally assume that inspection feedback contributes to school improvement through the mechanism of feedback acceptance, feedback research in general suggests that recipients' cognitive and affective responses are essential in the feedback acceptance process. Many studies in inspection research, however, failed to consider the relationship between feedback acceptance and teachers' cognitive and affective responses. To contribute to the bridging of this research gap, not only did we investigate the interplay between teachers' cognitive and affective responses, but we also investigated whether emotions mediate the relationship between cognitive responses and feedback acceptance. We conducted a survey-study on 687 teachers from 80 primary schools that have been inspected 8 weeks before the survey.

Our descriptive results indicate that the majority of Flemish teachers take a positive stance towards school inspectors and the inspection process, and that the Flemish educational context is characterised by high acceptance ratings of the inspection feedback received. This is reflected not only in the high mean scores for teachers' perceptions of the inspectors' credibility and organisational justice, but also in the high mean scores for teachers' experiences of joy. In contrast to earlier findings (see Penninckx & Vanhoof, 2015), findings revealed that teachers reported less anger and sadness.

Notably, although teachers are satisfied with the inspection outcome, this does not mean they are more likely to accept the inspection feedback, as indicated by the finding that teachers' emotions of joy are not directly related to feedback acceptance. This is also the case for sadness. Only teachers' anger seems directly related to feedback acceptance, and this is only to a very small extent.

Regarding the first research question, we found that the more positive a teacher perceives an inspector's trustworthiness and distributive justice, the less he or she will report emotions of anger and sadness. From this finding, we could infer that trustworthiness and distributive justice are antecedents of teachers' emotions regarding a school inspection. The importance of organisational justice is also demonstrated in its direct relationship with feedback acceptance. Regardless of the emotions experienced, teachers who report higher levels of procedural justice are more likely to perceive the inspection feedback as accurate than teachers who report lower levels of justice. This is in line with the research of Leung et al. (2001), who found that feedback acceptance increased when recipients perceived feedback as correct. The importance of both organisational justice and trustworthiness regarding feedback acceptance in the current study was discussed earlier by Colquitt and Rodell (2011), who uncovered a connection between the two variables that helps to explain our results. Their results indicate that employees associate their supervisors' adherence to justice with higher levels of trustworthiness. From this perspective, in addition to the ability of inspectors to provide fair feedback, it must be emphasised that the inspection process and the inspector's decision making and related behaviours should also be as transparent as possible and should ideally generate perceptions of trustworthiness. In this sense, the significant relationship between feedback clarity and higher levels of joy that is reflected in our data can also be associated with the need for clear expectations and transparency that has been highlighted in previous research (Gustafsson et al., 2015). Inspection feedback can allow inspectors to maintain communication with teaching staff and inform them about the official expectations and norms (Gärtnter, Wurster, & Pant, 2014).

Our findings confirm that feedback relevance is a critical success factor for feedback acceptance too (Ehren & Visscher, 2008). Our results demonstrate that inspection feedback that is perceived to be relevant will likely lead to higher levels of feedback acceptance among teachers but will also engender higher levels of anger and sadness. The importance of feedback relevance as an antecedent for anger and sadness can be explained by appraisal theory, which assumes that affective responses occur only when an event is experienced as being relevant (Roseman & Smith, 2001; Smith & Lazarus, 1990). As observed, not all cognitive responses are associated with

the experience of emotions of joy, anger, and sadness. This indicates that some cognitive responses are irrelevant to some emotions or that some cognitive responses are only associated with emotions in very specific situations (Scherer, 2005).

Of course, our study is not without its limitations First, from an international perspective, the Flemish inspection system, which is characterised by little to no personal consequences, is a relatively low-stakes accountability system for Flemish teachers (OECD, 2013; Van Bruggen, 2010); findings associated with the Flemish inspection system can therefore not be uncritically generalised to other educational systems. In systems where schools and teachers see inspectors as being primarily concerned with accountability rather than development, other antecedents and outcomes may be found. Future research should therefore compare and integrate findings from low-stakes and high-stakes educational evaluation environments (Altrichter & Kemethofer, 2015; Ehren et al., 2015). Second, we relied on self-reported data gathered on a single survey questionnaire, making the data susceptible to method bias (Cohen et al., 2011). The use of a cross-sectional design precludes causal inferences because this design does not take into account the fact that the connection between cause and effect takes place in time. The relationships in our path model must therefore be interpreted as relationships rather than causal links. Longitudinal research of emotions could enhance the understanding of how stable teachers' emotions and perceptions are and the extent to which teachers can regulate or adjust these emotions and perceptions over time. Triangulating data across different and complementary methods in future research will maximise validity and reliability. Lastly, only the relationships between cognitive responses, affective responses, and feedback acceptance were taken into account in this study. Feedback acceptance is no synonym for actual school improvement. Factors related to teachers' personality and the school environment constitute topics for further research (Ilgen et al., 1979).

Our results have important practical implications for policymakers and school inspectors. In order to enhance feedback acceptance, school inspectors should deliver feedback from a perspective of improvement and professional development rather than one of accountability.

As feedback acceptance depends largely on teachers' perceptions of organisational justice and perceptions of trustworthiness, new and established school inspectors should be trained to adhere to justice principles. Previous research has indicated that an inspection can exert a greater developmental effect on a school if teachers consider the inspection process and outcome high in quality (positive perceptions of the inspector's behaviour, psychometric quality, and transparency). Transparency of the inspection process and transparency of the criteria used

for determining the inspection judgment are therefore indispensable (Penninckx et al., 2016). In addition, for inspection feedback to have an impact on decision making, it must be presented clearly and perceived as relevant. Inspection feedback should include information about teachers' responsibilities, required skills and goals. We also advocate the use of 'feed-forward' strategies, such as reflection discussions with teachers and school management, a feature of the current Flemish inspection system. These development oriented dialogues, where teachers reflect on success factors and potential actions and targets for improvement under the guidance of the inspection team, can foster teacher ownership and can provide the desire and capacity in schools to learn and improve together.

## Appendix

**Table A.** Pearson correlations among the variables included in this study

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Expertise | 1.00 | | | | | | | | | | |
| 2. Trustworthiness | 0.90 | 1.00 | | | | | | | | | |
| 3. Procedural justice | 0.67 | 0.77 | 1.00 | | | | | | | | |
| 4. Distributive justice | 0.43 | 0.45 | 0.64 | 1.00 | | | | | | | |
| 5. Feedback constructiveness | 0.76 | 0.88 | 0.70 | 0.44 | 1.00 | | | | | | |
| 6. Feedback clarity | 0.64 | 0.64 | 0.55 | 0.57 | 0.71 | 1.00 | | | | | |
| 7. Feedback relevance | 0.75 | 0.76 | 0.68 | 0.55 | 0.82 | 0.83 | 1.00 | | | | |
| 8. Joy | 0.30 | 0.39 | 0.45 | 0.47 | 0.38 | 0.47 | 0.44 | 1.00 | | | |
| 9. Anger | -0.29 | -0.38 | -0.50 | -0.48 | -0.32 | -0.30 | -0.25 | -0.62 | 1.00 | | |
| 10. Sadness | -0.48 | -0.55 | -0.64 | -0.51 | -0.43 | -0.25 | -0.30 | -0.46 | 0.79 | 1.00 | |
| 11. Feedback acceptance | 0.59 | 0.62 | 0.76 | 0.64 | 0.59 | 0.55 | 0.69 | 0.43 | -0.37 | -0.52 | 1.00 |

*Note: Correlations are significant at the 0.001 level*

# STUDY 4

# *The Role of Feedback Acceptance and Gaining Awareness on Teachers' Willingness to Use Inspection Feedback*

**THIS CHAPTER IS BASED ON**

*Quintelier, A., De Maeyer, S., & Vanhoof, J. (Submitted). The Role of Feedback Acceptance and Gaining Awareness on Teachers' Willingness to Use Inspection Feedback.*

**ABSTRACT** *Feedback acceptance and use are often seen as requirements for teacher change after a school inspection. Non-educational research, however, points to the role of feedback recipients' willingness to use the feedback received as an intermediate phase between their acceptance and use of the feedback. It also postulates the importance of a recipient's awareness gained from the feedback, cognitive responses and individual characteristics. However, quantitative evidence in school inspection context to support this theory has been non-existent. This study draws on quantitative data collected from 687 teachers in 80 Flemish primary schools that had recently been inspected. By means of SEM, we build a research model that focuses on the relationship between cognitive responses, teachers' feedback acceptance, awareness gained from the inspection feedback received, and teachers' willingness to use inspection feedback. In addition, the relationship between individual teacher characteristics and the different components in the research model were also taken into account. The analysis reveals that teachers' willingness to use the feedback is predominantly explained by the perceived relevance of the inspection feedback. In addition, we found statistically significant relationships between teachers' willingness to use inspection feedback and feedback acceptance, and also between teachers' willingness to use inspection feedback and awareness gained from inspection feedback too.*

## 1. Introduction

Educational systems throughout the world have been encouraged to develop processes that improve the quality standards of education and student achievement. In Europe, the use of school inspections to assess and hold schools accountable for goals related to educational quality and student achievement has been well established (Gärtner et al., 2014). Inspections are often seen as a tool to provide feedback to schools for school improvement. Inspection feedback is defined in this study as specific information on the school's strengths and weaknesses in accordance with a set of preconceived standards (Ehren, 2016). School staffs are supposed to learn from this feedback and use it for further improvement through reflection upon their deficits and strengths (Coe, 2002). In addition, some educational studies also focus on the role of teacher change (changes in teachers' thinking and classroom behaviour) as a catalyst for successful school development efforts (Grossman et al., 2001; Richardson & Placier, 2001).

According to Ehren et al. (2013), besides accountability and school improvement, teacher change is often considered as another intended outcome of school inspections, as they provide feedback to teachers with the intent to develop their abilities to deliver high-quality teaching. This is not an obvious outcome of inspections, as most inspectorates are required by law to provide feedback at the school level. When feedback is targeted at the teacher level, strict anonymity must be guaranteed (OECD, 2015b). A previous study of Quintelier, Vanhoof, & De Maeyer (2018), however, found that teachers often receive substantive inspection feedback individually or in groups during a debriefing session regarding their classroom practices, while school-level feedback is generally included in an inspection report. Until now, it has been unclear whether and to what extent teachers are willing to engage in change processes after a school inspection (Penninckx, 2015). Therefore, insight into the relationship between inspection feedback and teachers' willingness to use this feedback is essential. The purpose of the current study is to develop a model that can help to unravel the important steps between providing inspection feedback to teachers and teachers' willingness to use this feedback. To develop this model, we delve into the broader literature on feedback use.

According to researchers in applied psychology, an individual's willingness to use feedback is influenced by his or her perceptions about the accuracy of the feedback received (i.e. 'feedback acceptance') (Ilgen et al., 1979; Kinicki et al., 2004). Other empirical studies support this assumption and state that feedback must first be accepted before it will be used (Brett & Atwater, 2001; Bell & Arthur, 2008). From this viewpoint, teachers' feedback acceptance is an important first step for teachers to support school improvement plans, to understand the benefits of innovation, and to feel secure in their role as implementers of particular actions (Leithwood, 2000).

Nevertheless, organisational psychologists have found that feedback recipients do not always accept feedback. They relate recipients' acceptance of feedback to the recipients' thoughts (cognitive responses) about source credibility (expertise and trustworthiness), feedback fairness (distributive and procedural justice), and features of feedback (feedback sign, constructiveness, clarity and relevance) (e.g. Brett & Atwater, 2001; Ilgen et al., 1979; Leung et al., 2001). These cognitive responses have also received theoretical and empirical attention in recent studies in the field of school inspection research (e.g. Quintelier et al., 2018, 2019). While most of these studies have emphasised the role of inspector credibility in school development processes (e.g. Chapman, 2002; MacBeath, 2006; Weiner, 2002), a recent study of Quintelier et al. (2019) demonstrated a positive relationship between teachers' acceptance of inspection feedback and

their cognitive responses regarding the inspectors' trustworthiness, feedback relevance, and distributive and procedural justice. This study, however, did not take into account teachers' willingness to use inspection feedback. In fact, to our knowledge, little or no research has explicitly examined how feedback acceptance or cognitive responses relate to teachers' willingness to use inspection feedback. Therefore, our first research aim is to describe the relationship between teachers' feedback acceptance and teachers' willingness to use inspection feedback. To maximise the understanding of this relationship, we consider teachers' cognitive responses as antecedents of feedback acceptance.

Based on findings in the field of psychological assessment feedback (Boudrias et al., 2013; Plunier et al., 2013), we distinguish 'awareness gained from feedback received' as a second component that we expect plays a role in processing feedback and shaping individuals' thinking and behaviour. Several studies in inspection research highlight the importance of the extent to which school inspection feedback creates awareness and leads to new insights into schools' and teachers' functioning in order to influence school improvement (e.g. Ehren, 2010; McCrone et al., 2007; Penninckx et al., 2014). For example, several authors found that staffs of schools with a positive inspection outcome are less likely to engage in actions for school improvement since the feedback they receive largely confirms what staff members are already aware of (Dedering & Müller, 2011; McCrone et al., 2007; Penninckx et al., 2014; Wilcox & Gray, 1996). Studies in the field of inspection research have rarely incorporated teachers' awareness gained from inspection feedback. Therefore, in this study, we aim to understand how teachers' awareness gained from inspection feedback influences their willingness to use this feedback.

Lastly, the characteristics of feedback recipients appear to influence their reactions to feedback. Both Ilgen et al. (1979) and Fedor (1991) have proposed that individual differences directly influence how individuals process feedback and are willing to use it. Concerning school inspection feedback, teachers may perceive feedback as less accurate if there is a discrepancy between the feedback provided and teachers' views of themselves as professionally competent. However, studies that investigate change processes in education seldom take the relationships between teachers' reactions and teacher characteristics into account (Zuber & Altrichter, 2018). Therefore, this study incorporates four individual teacher characteristics that have proven to be important in feedback research. These include (1) *feedback utility* (teachers' perceived utility of feedback in general), (2) *feedback self-efficacy* (teachers' perceived competence to interpret and respond to feedback appropriately), (3) *teacher self-efficacy* (teachers' perceptions of their ability to perform well as teachers) and (4) *self-esteem* (the overall value that a teacher places on

themself as a person) (Bell & Arthur, 2008; Kluger & DeNisi, 1996; London & Smither, 2002; Zuber & Altrichter, 2018).

In sum, we will focus in this study on teachers' cognitive responses, feedback acceptance and awareness gained from inspection feedback, as well as on the individual teacher characteristics of feedback utility, feedback self-efficacy, teacher self-efficacy and self-esteem. Given our aim of studying the relationships between these concepts, we begin by discussing our conceptualisation of these concepts. We build on this literature review to develop a research model for our study (see Figure 1) and to formulate the research questions.

## 2. Conceptual framework

In this section, we provide an overview of the concepts included in the current study and present the relevant evidence available from studies in educational and non-educational contexts.

### 2.1 Processing inspection feedback: Feedback acceptance and awareness gained from inspection feedback

Studies in the field of school change have shown that altering teachers' practices is difficult (Fullan, 2002). Researchers in applied psychology have stated that individual processing of feedback is necessary to changing an individual's thinking and behaviour because it is the feedback recipient who decides if developmental efforts are worthwhile (Bell & Arthur, 2008). Plunier et al. (2013) determined that both feedback acceptance and awareness gained from the feedback are necessary to process feedback. Based on earlier studies in psychology (Anseel & Lievens, 2009; Boudrias et al., 2013, Ilgen et al., 1979), the current study defines 'feedback acceptance' as teachers' perceptions about the accuracy of the inspection feedback received and refers to 'teachers' awareness gained from the inspection feedback' as the perceptions of an individual teacher that the inspection feedback received has contributed to a better understanding of the different aspects of learning and teaching practices at the school and teacher levels'. According to Boudrias et al. (2013), changes in feedback acceptance and awareness gained from feedback are related, although there is no conditional or necessary association between them. The following examples represent evidence from school inspection research regarding the role of teachers' feedback acceptance and awareness gained from inspection feedback on teacher change.

According to several authors, the extent to which teachers accept feedback influences the extent to which schools and teachers act upon it (e.g. Gustafsson & Myrberg, 2011; McCrone et al., 2007), although more recent studies have found that feedback acceptance alone does not necessarily

lead to the use of feedback (Ehren et al., 2015; Gärtner et al., 2014; Gustafsson et al., 2015). Wurster and Gärtner (2013), for example, stated that teachers who accept inspection feedback but perceive the inspection as a tool for accountability will feel less need to act on the feedback. The use of rewards or sanctions can interfere with teachers' initial response not to act on feedback and can encourage unintended and undesirable behaviour such as the exclusion of unrewarded activities (Penninckx & Vanhoof, 2015). The finding that teachers are not always willing to change their teaching after an inspection has been substantiated in earlier studies as well. Gärtner et al. (2009) found, for example, that only a minority of teachers in recently inspected German schools reacted actively to their school's inspection report. Teachers' perceptions of the inspection quality are often seen as a key to changing their teaching practice (Chapman, 2001), although the inspection visit and related feedback is found to disrupt teachers' practices in some cases as well (Case et al., 2000).

Research is scarce on the effects of inspection feedback on teacher awareness. Researchers suggest that feedback from inspections can offer new insights into school and classroom practices, and can influence principals and teachers' intentions to respond to this feedback (Dedering & Müller, 2011; McCrone et al., 2007). It must be acknowledged, however, that this assumption is not always confirmed. According to Landwehr (2011), inspectors tend to identify shortcomings that are already known to the school leaders and teachers, but by publishing them in an inspection report, they note these shortcomings officially within and outside the school. Earlier research found that inspection feedback that confirms teachers' own insights into their strengths and weaknesses does not always encourage them to use the feedback received (McCrone et al., 2007). No researchers, to the best of our knowledge, have studied the relationship between teachers' acceptance of and awareness gained from inspection feedback and their willingness to use this feedback. Thus, we propose a model that includes both feedback acceptance and awareness gained from feedback, in order to examine their specific relationships with antecedents and outcomes.

### 2.2 Antecedents of feedback acceptance and awareness gained from inspection feedback

The current study refers to teachers' cognitive responses in the context of a school inspection visit as their perceptions or thoughts regarding the following: the inspector's credibility (expertise and trustworthiness); the fairness of the inspection process and outcome (respectively procedural and distributive justice); and features of the inspection feedback received (constructiveness, clarity, and relevance) (Quintelier et al., 2018, 2019). A definition and overview of each variable, alongside evidence from inspection contexts, is included in Table 1.

**Table 1.** Conceptual framework of the current study: cognitive responses to feedback (1/2)

| Concept | Definition | Exemplary overview of findings from earlier research |
|---|---|---|
| **Trustworthiness** | Trustworthiness represents the degree to which a teacher trusts an inspector's intentions and motives, free from biasing factors, at the time of feedback (adapted from Steelman & Rutkowski, 2004). | When inspectors are perceived as professional, collegial, and nonthreatening, teachers are more likely to accept negative inspection feedback (e.g. Erdem & Yaprak, 2013; Kelchtermans, 2007; McNamara & O'Hara, 2006). A positive relationship between school inspectors and teachers is assumed to increase feedback acceptance as a precursor to further improvement (Ehren & Visscher, 2008; Kogan & Maden 1999). |
| **Procedural justice** | Procedural justice relates to the perceived fairness of the inspection process in which information was gathered to determine the outcomes (adapted from Colquitt, 2001). | Efforts to increase transparency strengthen schools' satisfaction with inspections (Wilcox & Gray, 1996). Although evidence remains rather limited, teachers are more likely to accept inspection feedback that is provided by inspectors who set clear expectations regarding educational quality and who are willing to engage in a professional dialogue (Gustafsson et al., 2015; Thomas et al., 2000). |
| **Distributive justice** | Distributive justice is defined as the perceived fairness of the inspection outcome. | According to several scholars (Kelchtermans, 2007; Quintelier, Vanhoof, & Quintelier, 2018), teachers are more likely to reject negative feedback in inspection reports when it is perceived as unfair. When teachers are aware of window dressing activities in schools with positive inspection outcomes, they report feelings of injustice and are less willing to accept negative inspection outcomes (Quintelier, Vanhoof, & Quintelier, 2018). |
| **Feedback relevance** | Feedback relevance represents teachers' perceptions of information significance. | Teachers are more likely to accept inspection feedback when its content is relevant to them (Ehren and Visscher, 2008; Quintelier, Vanhoof, & Quintelier, 2019). A previous qualitative study among recently inspected teachers showed that inspection feedback was considered to be relevant when it was related specifically to the classroom level and core activities of teaching, such as lesson planning and preparation. Feedback on school-level factors, such as infrastructure and the curriculum were perceived as less relevant, as the majority of respondents felt less responsible for these domains (Quintelier, Vanhoof, & Quintelier, 2018). |

A previous study in the inspection context found that teachers' cognitive responses regarding inspector trustworthiness, distributive and procedural justice and feedback relevance were positively related to their acceptance of inspection feedback (Quintelier et al., 2019). Concerning procedural justice, for example, the latter study found that teachers who believed that the inspection process represented a fair and transparent evaluation scored higher on measures of feedback acceptance (Quintelier et al., 2019). The relationship between teachers' cognitive responses and the awareness gained from inspection feedback has not yet been studied in inspection research.

The existing organisational literature has provided similar explanations about how individuals' cognitive responses affect their acceptance of feedback (Ilgen et al., 1979; Leung et al., 2001; Strijbos et al., 2010), while only one study examined the relationship between feedback acceptance, awareness gained from feedback and individuals' cognitive responses about source trustworthiness and distributive justice (Boudrias et al., 2013).

### 2.3 Teachers' willingness to use inspection feedback

As noted above, an individual's acceptance of feedback does not equal his or her use of this feedback. Both Ilgen et al. (1979) and Kinicki et al. (2004) highlighted the importance of an individual's willingness to use feedback to improve their job performance in predicting their actual response to feedback (Ilgen et al., 1979; Kinicki et al., 2004; Steelman & Rutkowski, 2004). Based on these studies, the current study defines teachers' willingness to use the inspection feedback received as teachers' desire to perform better on areas addressed in the inspection feedback received.

The relationship between feedback acceptance and teachers' willingness to use the inspection feedback received has rarely been studied in the field of school inspection research. A small-scale study in the Flemish education context has demonstrated that teachers who accept inspection feedback are generally willing to use this feedback, but they sometimes find it difficult to generate new ideas for classroom improvement as they feel hindered by the absence of guidelines to initiate and implement improvement actions (Quintelier et al., 2018). Other studies only described the extent to which teachers are willing to use the inspection feedback received. In Chapman's (2001) study, only 20% of participating teachers were willing to change their practice as a result of inspection feedback. This is in line with the results of a German study by Gärtner et al. (2014) who found that teachers and principals tended to judge aspects of school quality as highly stable over time and did not report any change after their schools had been

inspected. Given the scarcity of current research on the role of teachers' willingness to use inspection feedback and to engage in change processes, further research on the antecedents and consequences of this phase is urgently needed (Penninckx, 2015).

### 2.4 Individual characteristics of teachers

Although several authors have observed the influence of feedback recipients' characteristics, such as attitudes toward feedback, self-efficacy, and self-esteem on their thinking and behaviour within organisational contexts (Bell & Arthur, 2008; Kluger & DeNisi, 1996; London & Smither, 2002), none of these characteristics has, to our knowledge, been studied in the context of teachers' willingness to use inspection feedback. Moreover, there seems to be a lack of school inspection research taking individual teacher characteristics into account (Zuber & Altrichter, 2018). Based on a literature review, we identified four characteristics that are highly predictive of individuals' willingness to use performance feedback.

(1) *Feedback Utility:* The perceived utility of feedback in general (or feedback utility) has been found to influence feedback recipients' motivation to accept and use feedback (Brett & Atwater, 2001; Steelman & Rutkowski, 2004). Individuals who believe that feedback is useful are more likely to use this information (Makiney & Levy, 1998). This has been substantiated in a study by Tuytens and Devos (2011), where a small significant positive relationship was found between teachers' feedback utility and engagement in professional learning activities as a result of feedback discussed during teacher evaluation procedures.

(2) *Feedback Self-Efficacy:* Since inspection feedback often does not include specific guidelines for classroom and school development, teachers' lack of competence regarding data review and analysis can be seen as another reason for the limited use of feedback data for classroom and school development (Ehren et al., 2014). Therefore, feedback self-efficacy, referring to teachers' perceived competence to interpret and respond to feedback appropriately, is included as a precondition for feedback acceptance.

(3) *Teacher Self-Efficacy:* Teacher self-efficacy is a job-specific form of self-efficacy defined as 'teachers' perception of their ability to (a) perform required professional tasks and to regulate relations involved in the process of teaching and educating students (classroom effects) and (b) perform organisational tasks, become part of the organisation and its political and social processes (organisational effects)' (Friedman & Kass, 2002, p. 684). These perceptions determine the goals teachers set for themselves, how much effort they

expend to achieve their goals and how they motivate themselves (Bandura, 1997). Zuber and Altrichter (2018) examined the relationship between educational change and individual characteristics among Austrian primary school teachers. Their results indicated that self-efficacy fosters openness to educational standards reform which, in turn, increases the likelihood of teachers' participation in data use.

(4) *Self-Esteem:* Teachers' self-esteem refers to the overall value that a teacher places on themselves as a person. It describes the individual's appreciation of their own worth. Research suggests that individual differences in self-esteem might be related to individuals' varied reactions to positive and negative feedback (Kluger & DeNisi, 1996). Earlier research indicates that positive feedback led to higher performance for individuals with high (vs. low) self-esteem, and that, when receiving negative feedback, individuals with high self-esteem lower their self-competence evaluations less than those with low self-esteem (Shrauger & Rosenberg, 1970).

These examples illustrate that insight into the role of individual teacher characteristics on teachers' feedback acceptance and willingness to use inspection feedback is needed to expand our understanding of teachers' reactions to inspection feedback.

### 2.5 The current study

While school inspections can be viewed as a tool to facilitate teacher change through the feedback they provide to teachers (Ehren et al., 2013), there are few studies that verify this assumption and examine the processes involved. Hence, the current study aims to examine the relationship between teachers' willingness to use inspection feedback and its antecedents. Based on our literature review, we propose a model (see Figure 1) that links teachers' individual characteristics and cognitive responses to their acceptance of inspection feedback and awareness gained from the feedback, and to their willingness to use the feedback.

The aims of this study are twofold. First, this study contributes to the current knowledge base because it expands the focus on the role of feedback acceptance in school improvement processes with an emphasis on teachers' awareness gained from inspection feedback. Second, this study posits intermediate processes between teachers' cognitive responses and their willingness to use the inspection feedback received. To these ends, we propose the following research questions (RQ):

- *RQ1. To what extent are teachers willing to use the inspection feedback received?*

- *RQ2. To what extent are differences between teachers' willingness to use the inspection feedback received related to teachers' feedback acceptance, teachers' awareness gained from the inspection feedback received, and their antecedents (teachers' cognitive responses)?*

- *RQ3. How are differences in teachers' individual characteristics related to (a) their cognitive responses, (b) their feedback acceptance and awareness gained from the inspection feedback received, and (c) their willingness to use the inspection feedback received?*

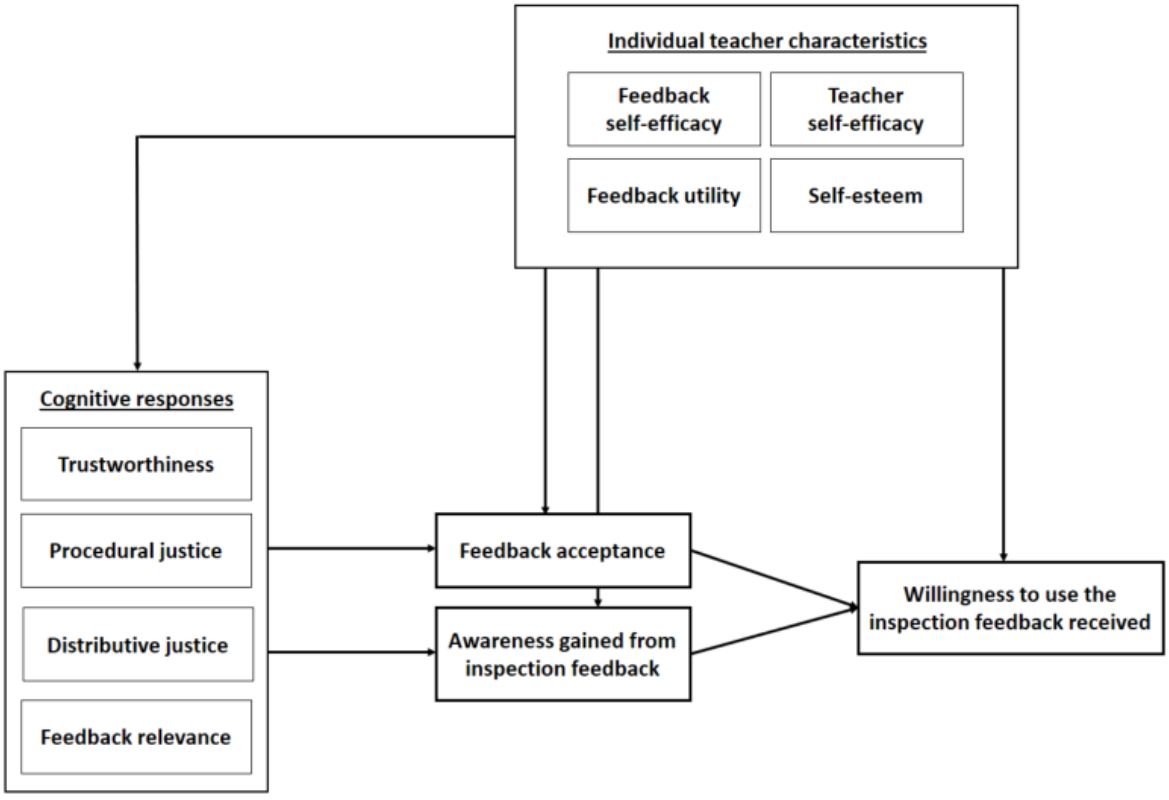


**Figure 1.** Conceptual model for teachers' willingness to use school inspection feedback

## 3. Method

This article reports on a survey of teachers' perceptions regarding the above-mentioned aspects. The descriptive results on the scales provide an answer to our first research question. Using path analysis, we tested the existence and the strength of the relationships presented in the theoretical framework. Since this study was conducted in Flanders, we first provide an overview of the Flemish school inspection procedure.

### 3.1 Research context

In Flanders, every school is inspected once every six years; this constitutes the sole accountability measure for schools. Unlike education systems in many other countries, the Flemish education system has no central exams or national student tests (OECD, 2015b). The Flemish inspection system is generally perceived as a relatively low-stakes inspection context compared to other educational contexts (Van Bruggen, 2010). An inspection generates a judgment on the school which determines whether the school retains its recognition. There are two possible inspection outcomes: (a) a favourable opinion (with or without major shortcomings) and a school's retention of its recognition without a follow-up or (b) an unfavourable opinion, resulting in initiation of the withdrawal procedure for a school's recognition unless the school devises an improvement plan and obtains assistance from an external agency. To support quality improvement, opportunities for improvement are also addressed in the inspections (Vlaams Ministerie van Onderwijs en Vorming, 2016). Inspectors are not allowed to provide individual feedback on teachers or principals; the inspection report can only contain school-level feedback. When feedback is targeted at the teacher level, strict anonymity must be guaranteed (OECD, 2015b).

### 3.2 Sample

The sample included every Flemish primary school that was inspected from January through November 2018, for a total of 247 schools. Between two and eight weeks after the inspection, the leader of each school received a phone call followed by an email informing them of the study. Paper or online questionnaires were sent to teachers in all schools whose leaders agreed to participate. We discussed a preliminary version of the questionnaire with three teachers from a recently inspected primary school (this school was thus excluded from further participation). The feedback we gained from these discussions led to adaptations to the final questionnaire. We collected survey data from 687 teachers in 80 schools (for a response rate of 32.4%). Regarding the outcome of inspections, all schools whose leaders were willing to participate in our study had received a favourable opinion. This is the case with the vast majority of Flemish schools; during the 2017–2018 school year, for example, 149 of the 155 inspected primary schools received favourable opinions, while only six did not (Onderwijsinspectie, 2019).

In order to generate a representative sample, both private and public schools were included. A total of 33.0% of the respondents worked in preschools, 61.4% were from primary schools, and 5.6% of participants worked in both preschools and primary schools. Of all participants, 97.5% held a bachelor's degree and 2.5% of participants held a master's degree. The mean age of the

respondents was 40 years, and their ages ranged from 21 to 61 years. The mean of respondents' teaching experience in their current school was 14.3 years (with a range of 1–39 years), while their mean overall teaching experience was 17.7 years. In this sample, 84.8% of the respondents were employed full-time as a teacher and 15.24% were employed part-time. Our sample consisted of 87.5% female and 12.5% male participants. These figures indicate a good representation with regard to the target population (Vlaamse Overheid, 2018). School student populations varied from 54 to 459 pupils, with 6 to 33 teachers per school.

### 3.3 Instruments

We used self-report questionnaires to gather our data. All items were in Dutch. Most scales were derived using existing and validated survey instruments (Aelterman et al., 2007; Franck et al., 2008; Linderbaum & Levy, 2010; Quintelier et al., 2019). The scales regarding teachers' awareness gained from inspection feedback and teachers' willingness to use inspection feedback were developed and validated during this study.

Table 2 (see 4.1) provides an overview of the scales that were included in the questionnaire. The table includes an example item for each scale in addition to information about the psychometric characteristics of the scales. School inspector trustworthiness and feedback relevance were measured using a bipolar scale, and each item was provided with a 7-step continuum for response. This approach is consistent with earlier studies' use of bipolar scales to measure source credibility (e.g. McCroskey & Teven, 1999). For the other scales, a 7-point Likert scale was used for all items, with a range from 1 = entirely disagree to 7 = entirely agree and an additional category for 'don't know/inapplicable'.

To determine the construct validity of our survey instrument (i.e. the extent to which the items are compatible with the theoretical construct) (Shin, 2017), we conducted an exploratory factor analysis (EFA) across all items and data with oblique rotation. Since the KMO-test verified the sampling adequacy (0.81) and Bartlett's test of sphericity was significant ($\chi 2 = 196.027$, df = 21, p = 0.00), factor analyses were appropriate for our data. We only withheld items with a factor loading > .35 (Plucker, 2003). The 11-factor solution (represented in Appendix Table A) consisted of factors with a minimum of three items and explained 60% of the total variance.

The construct validity of the single scales was tested through a confirmatory factor analysis (CFA) using the software package lavaan in R (Rosseel, 2012). Fit indices used to evaluate the validity of the survey scales included the Comparative Fit Index (CFI), the Tucker Lewis Index (TLI) and the Root Mean Square Error of Approximation (RMSEA). Hu and Bentler's (1999) cut-

off values were used as indications for a good model fit: CFI and TLI ≥ 0.95, RMSEA ≤ 0.08. In sum, CFA confirmed the validity of all scales (see Appendix A for an overview of the fit indices of the scales). The estimated factor scores based on the CFA are used as variables in the analyses to test our model.

### 3.4 Data analysis

In order to answer the first research question, we calculated the descriptive statistics of the different scales. The second and third research questions were analysed using Structural Equation Modelling (SEM) with the software package lavaan in R (Rosseel, 2012). This technique allowed for modelling the direct and indirect relationships between the constructs in this study. Based on our conceptual model (see Figure 1), a path model was built with teachers' feedback acceptance and awareness gained from inspection feedback as mediators between teachers' cognitive responses and teachers' willingness to use inspection feedback. Covariances among teachers' cognitive responses and among teachers' individual characteristics were taken into account. The nested structure of the data (teachers in schools) was represented using the MLR estimator that takes into account the non-independence of observations and also the possible non-normality of the data (Stapleton et al., 2016). Modification indices were examined to further optimise the initial model.

## 4. Results

Table 2 summarises the descriptive results regarding teachers' reactions to inspection feedback. These results provide an answer to our first research question. After this, we discuss the explanatory results which provide insight into the second and third research questions.

### 4.1 Descriptive results

As shown in Table 2, teachers in our sample, on average, have positive perceptions regarding the inspection teams, processes and inspection outcomes. In general, they consider the school inspectors as trustworthy (M = 6.10) and the inspection process and inspection outcomes as fair (mean scores for procedural justice and distributive justice, respectively M = 6.23 and M = 6.11). Our data show that teachers respond slightly less positively regarding the feedback relevance, although they are still positive (M = 5.80).

| | No. of | M | SD | Cronbach's |
|---|---|---|---|---|
| **Cognitive responses** | | | | |
| **Trustworthiness**<br>*In general, the inspector was unreliable-reliable.* | 5 | 6.10 | 0.96 | **0.87** |
| **Procedural justice**<br>*I believe that the inspection process at our school went fairly.* | 4 | 6.23 | 0.96 | 0.87 |
| **Distributive justice**<br>*The final inspection outcome reflects the school's efforts.* | 4 | 6.11 | 1.00 | 0.89 |
| **Feedback relevance**<br>*In general, the inspection feedback was irrelevant for me-relevant for me.* | 3 | 5.80 | 0.92 | 0.78 |
| **Feedback acceptance**<br>*I generally find the inspection feedback accurate.* | 4 | 5.98 | 0.9A | 0.78 |
| **Awareness gained from inspection feedback received**<br>*The inspection feedback makes me more aware of the goals to be achieved during my lessons.* | 12 | 4.36 | 1.27 | 0.93 |
| **Willingness to use inspection feedback**<br>*I am willing to change my teaching practice in the classroom based on the inspection feedback.* | 4 | 5.80 | 0.91 | 0.79 |
| **Individual teacher characteristics** | | | | |
| **Feedback Utility**<br>*Feedback is critical for improving performance.* | 4 | 5.76 | 0.83 | 0.84 |
| **Feedback Self-efficacy**<br>*I believe that I have the ability to deal with feedback effectively.* | 4 | 5.46 | 0.84 | 0.81 |
| **Teacher self-efficacy**<br>*I feel that developing knowledge and skills in children works well for me.* | 4 | 6.03 | 0.58 | 0.83 |
| ***Self-esteem***<br>*I feel I do not have much to be proud of.* | 4 | 5.76 | 0.85 | 0.75 |

Regarding teachers' feedback acceptance and awareness gained from inspection feedback, the mean of 5.59 and 4.36 implies that, although teachers tended to agree with the inspection feedback, they responded neutrally to the question of whether the inspection feedback raised their awareness regarding aspects of their learning and teaching practices. Item-level analysis reveals that teachers generally agreed with the findings of the inspectors (M = 5.95) and found the inspection feedback accurate (M = 5.70). According to our respondents, the inspection feedback made them more aware of shortcomings at the school level (M = 5.06) and of the certification requirements for a school (M = 4.94). The mean of 3.39 indicates that teachers disagreed that the inspection feedback made them more aware of the methods and manuals' guidelines. Frequencies show that only 31% of the teachers moderately/entirely agreed with this item, while 69% of the respondents responded neutrally to negatively for this variable.

The extent to which teachers were willing to use inspection feedback is primarily positive (M = 5.80). At the item level, respondents were more willing to use the feedback to alter their teaching and evaluation practices (M = 5.80 and M = 5.81 respectively) than to use the inspection feedback for school policy improvement (M = 5.43).

### 4.2 Explanatory results

First, Pearson product-moment correlations among all constructs under study were calculated (Appendix Table A). We used SEM to test our conceptual model (Figure 1). Since the fit indices for the initial model suggested a less-than-adequate fit (CFI = 0.98; TLI = 0.82; RMSEA = 0.10; SRMR = 0.02), we can conclude that this model did not fit the data well. Examination of the modification indices suggested that the model could be improved by adding a path to the model. The next phase in the specification of our model comprised the inclusion of a direct path from feedback relevance to teachers' willingness to use inspection feedback. This resulted in good fit statistics (CFI = 0.99; TLI = 0.99; RMSEA = 0.02; SRMR = 0.01). The standardised regression weights and significance levels of this model are depicted in Figure 2, which includes only those paths that are statistically significant. For the sake of clarity, paths going from individual teacher characteristics to all variables in the model are not displayed but can be found in Table 3.

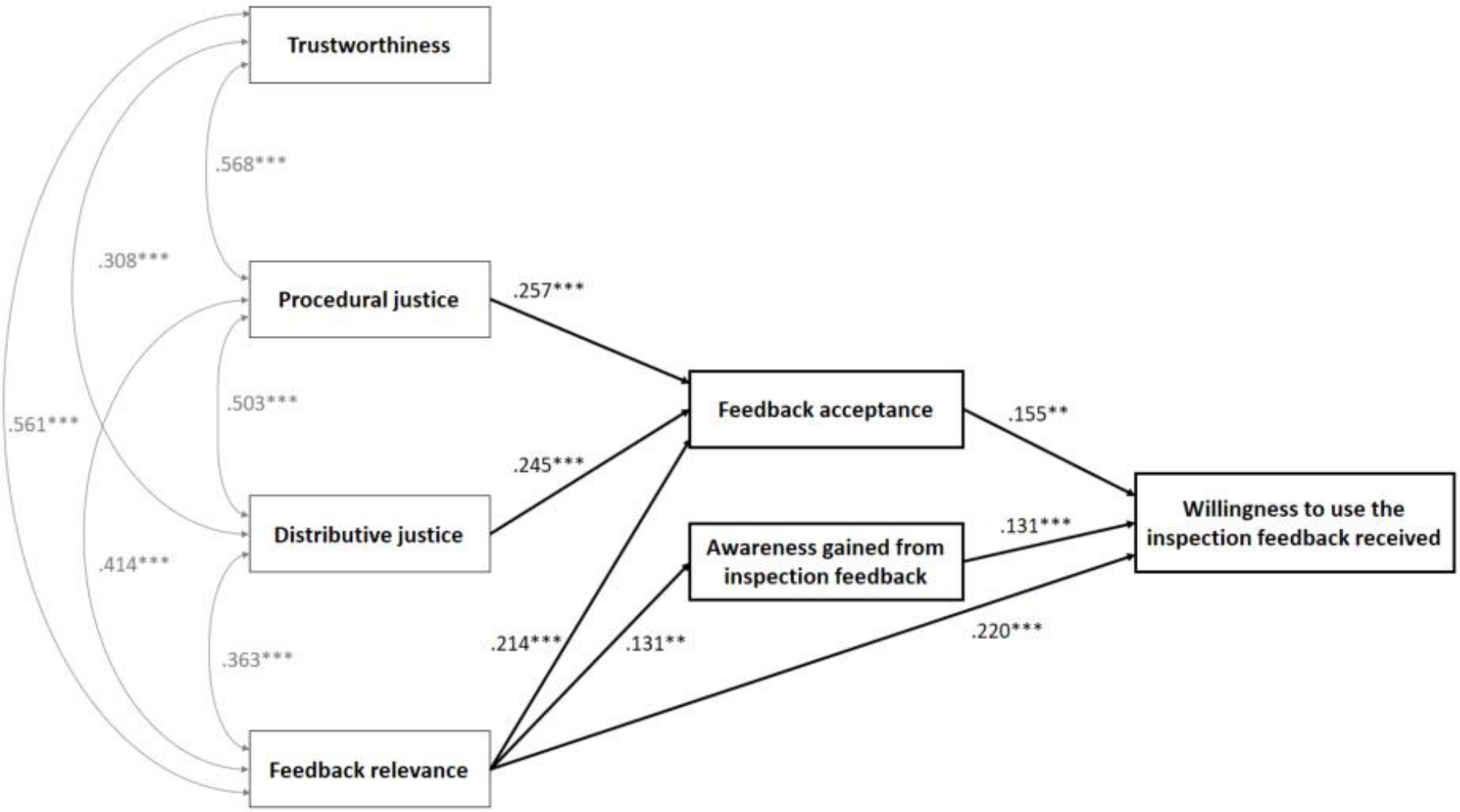


**Figure 2** Path model with standardised parameter estimates (*$p < .05$, **$p < .01$, *** $p < .001$)

**Table 3.** Statistically significant paths going from individual teacher characteristics to all variables

| | Feedback utility | Feedback self-efficacy | Teacher self-efficacy | Self-esteem |
|---|---|---|---|---|
| **Inspector trustworthiness** | | | | .132** |
| **Procedural justice** | .153** | .084* | .148*** | |
| **Distributive justice** | .099* | .121** | .112** | |
| **Feedback relevance** | .195*** | .107* | | |
| **Feedback acceptance** | .102* | | | |
| **Awareness gained from inspection feedback** | .129** | | -.121** | .088* |
| **Willingness to use inspection feedback** | .152*** | | | |

With regard to the relationship between teachers' cognitive responses, feedback acceptance and willingness to use the feedback received, our results show that teachers' willingness to use the feedback received is positively related to feedback acceptance (β = .155), albeit to a small extent. Further, results show that three of the four postulated relationships between teachers' cognitive responses (procedural justice, distributive justice and feedback relevance) and feedback acceptance are statistically significant (respectively β = .257, β = .245, and β = .214). Respondents who assessed the inspection process as fair reported a higher degree of feedback acceptance. There was no statistically significant relationship demonstrated between inspector trustworthiness and feedback acceptance.

The path model also confirms our assumption that teachers' awareness gained from inspection feedback received would relate positively to teachers' willingness to use the feedback (β = .131). The relationship between teachers' cognitive responses and awareness gained were not all statistically significant. We only found a positive relationship between feedback relevance and awareness gained from the inspection feedback received (β = .214). In other words, teachers who perceived the inspection feedback as relevant reported an increased awareness resulting from the feedback they received.

As shown in Table 3, the variances within the different constructs are only to a limited extent related to differences in individual teacher characteristics. We found statistically significant relationships between feedback self-efficacy and respectively procedural justice, distributive justice and feedback relevance, but also between feedback utility and procedural justice and between distributive justice and feedback relevance. In addition, statistically significant relationships were found between feedback utility and respectively teachers' acceptance of feedback, awareness gained from inspection feedback received and teachers' willingness to use

the feedback. These results suggest that the more teachers perceive feedback as a necessary tool for professional development, the more willing they are to use the inspection feedback that they have received.

Differences in teachers' self-efficacy are positively related to teachers' perceptions of procedural and distributive justice. This contrasts with a negative relationship between teacher self-efficacy and awareness gained from inspection feedback received, indicating that the more teachers believe in their ability to teach well, the more negatively they respond to the question of whether the feedback received contributed to a better understanding of the different aspects of learning and teaching practices. Differences in self-esteem did not play an important role in our model since trustworthiness was not statistically related to teachers' processing of inspection feedback and the relationship between self-esteem and teachers' willingness to use inspection feedback proved negligible.

**Table 4.** Total explained variance of dependent variables

| | **The total explained variance ($R^2$)** |
|---|---|
| **Inspector trustworthiness** | 0.033 |
| **Procedural justice** | 0.100 |
| **Distributive justice** | 0.089 |
| **Feedback relevance** | 0.076 |
| **Feedback acceptance** | 0.443 |
| **Awareness gained from inspection feedback** | 0.089 |
| **Willingness to use inspection feedback** | 0.225 |

The overall model provides a reasonable explanation for teachers' feedback acceptance. The $R^2$ value denotes that 44% of the variance in this variable can be explained by the model. Additionally, the model explains the variation in teachers' awareness gained from feedback and, to a smaller extent, teachers' willingness to use the inspection feedback received as the $R^2$ value shows a percentage of 9% and 23% of explained variance, respectively.

## 5. Conclusion and discussion

Using data from self-report questionnaires, this study investigated the extent to which 687 teachers from 80 primary schools accepted and were willing to use school inspection feedback to alter their teaching and learning practices, and to what extent the feedback contributed to their understanding of the different aspects of learning and teaching practices, thus leading to

increased awareness. It also examined the relationship between teachers' willingness to use inspection feedback and its antecedents and studied the differences in teachers' reactions to feedback as related to individual teacher characteristics. These topics are discussed consecutively.

First, we found that teachers largely accepted the inspection feedback received, but that the awareness they gained from the inspection feedback was limited. Teachers were largely willing to use the feedback to alter their teaching and evaluation practices, but less willing to use it to make changes at the school level (school policy purposes). An explanation for this finding could be that Flemish teachers feel less called upon to participate in improvement attempts at the level of school policy. Consequently, teachers may tend to use inspection feedback to make decisions in their own classrooms, rather than to make decisions concerning school organisation, budgeting or staffing (OECD, 2013).

Next, this study provided support for the postulated relationship between teachers' willingness to use inspection feedback and feedback acceptance, and also between teachers' willingness to use inspection feedback and awareness gained from inspection feedback, a component that has not often been addressed in school inspection research. The relationship between feedback relevance and teachers' willingness to use inspection feedback was found to be statistically significant as well. The significance of positive perceptions of feedback relevance was also shown to be related to teachers' feedback acceptance and to their awareness gained from inspection feedback. Based on the current results, the perceived relevance of feedback seems a very important predictor of subsequent improvement after a school inspection, although this topic is also underexplored in existing inspection research.

As in previous studies in the field of feedback research, the selected individual teacher characteristics of feedback self-efficacy, feedback utility and teacher self-efficacy were found to be related to components of the feedback process model (Bell & Arthur, 2008; Kluger & DeNisi, 1996; London & Smither, 2002). Both feedback self-efficacy and feedback utility were related to teachers' cognitive responses to procedural justice, distributive justice and feedback relevance. We also found a direct relationship between feedback utility and feedback acceptance, awareness gained from inspection feedback and teachers' willingness to use the feedback, but these relationships were not demonstrated for feedback self-efficacy. Our results are thus in line with most researchers, that have stated that feedback recipients' beliefs about feedback utility are positively related to their use of this feedback to enhance their professional learning activities (Brett & Atwater, 2001; Linderbaum & Levy, 2010; Tuytens & Devos, 2011).

The negative relationship demonstrated between teacher self-efficacy and awareness gained from the inspection feedback received is remarkable. Teachers who believe strongly in their ability to teach reported that inspection feedback did not contribute to their understanding of the different aspects of learning and teaching practices. According to Lapp and Fisher (2011), there is evidence that teachers tend to overestimate their own knowledge and skills. A small degree of overestimation can increase an individual's efforts and perseverance beyond what a lower sense of self-efficacy can generate. However, a gross overestimation of one's knowledge and skills can lead to resistance to engagement in professional development opportunities (Bandura, 1997). This could also explain the lack of a statistically significant relationship between teachers' self-efficacy and their willingness to use the inspection feedback received. Based on these findings, we cannot confirm the findings from Huber and Altrichter's (2017) study that point to a strong link between self-efficacy and teachers' willingness to participate in competence-oriented teaching and data use. Further in-depth research should explore this phenomenon to understand the role of teacher self-efficacy in feedback use processes.

An important contribution of the current study to the field of research on inspections is that we applied theoretical concepts from a broad range of feedback literature to the context of school inspection feedback and operationalised these indicators. Our results show that each scale measured one and only one theoretical concept and that the variance across indicators of different concepts (e.g. feedback relevance, feedback acceptance, awareness gained, willingness to use) was due to conceptual differences and not to measurement issues. Contrary to what is suggested in theoretical feedback models (e.g. Ilgen et al., 1979), the variance in teachers' feedback acceptance and willingness to use inspection feedback is only to a small extent explained by their cognitive responses and individual characteristics. Much work remains to be done as other determinants of teachers' feedback acceptance and their willingness to use the inspection feedback they received can be taken into account in further research. For example, specific research on the role of contextual factors may provide a useful addition to the results of this study.

Our findings offer opportunities for further research despite their limitations. First, we cannot claim to provide evidence on the causal effects of school inspections, since our research was based on cross-sectional data which generally does not distinguish correlation from causation. In order to create a better basis for causal inference, a longitudinal research design could be used to compare, for example, the differences in responses of teachers before, during and after an inspection (in the short and long term). In addition, recent studies on the effects of school

inspections have argued that teachers are more likely to accept inspection feedback in low-stakes systems (such as Flanders) than in high-stakes systems (Ehren et al., 2015; Altrichter & Kemethofer, 2015; Kemethofer et al., 2017). Therefore, we recommend future research that compares and integrates findings from low-stakes and high-stakes educational evaluation environments. Future research could expand these results with structured interviews or case studies to understand more fully the relationship between teachers' receipt of inspection feedback and their willingness to use this feedback at the classroom and school levels.

Based on our findings, we can conclude that, when providing inspection feedback to teachers, inspectors should take the relevance of this feedback into account to encourage teachers' feedback acceptance and their willingness to use this feedback. Based on a previous study, we know that teachers perceive inspection feedback as relevant when it relates to core activities at the classroom level (Quintelier, Vanhoof, Heyninck, & Penninckx, 2017). In some countries, such as England, school leaders are invited to become part of an inspection team so they can use their experience and knowledge in the development of their own schools (Ehren, 2016). This could provide an opportunity for teachers in Flanders to undertake similar activities, so they can acquire cross-school and cross-network expertise. Furthermore, we believe that teachers will use inspection feedback at both the school and classroom levels when they have a sense of ownership and a belief that they can influence and lead school improvement efforts. School leaders should ensure that their schools' organisation allows teachers to break down barriers and to achieve their collective purpose of fostering learning for all (Saunders et al., 2017). Finally, our results show that individual teachers' characteristics are related to their cognitive responses and their subsequent reactions to feedback. Teacher development programs could incorporate guidance on how to deal with feedback, in order to increase teachers' perceptions of the usefulness of feedback and to strengthen their capacities to use it. If the development-oriented aspects of feedback are emphasised, teachers can practise giving and receiving feedback and thus increase their confidence in working with it.

## Appendix

**Table A.** Pearson correlations among the variables included in this study

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Trustworthiness | 1.00 | | | | | | |
| 2. Procedural justice | 0.65*** | 1.00 | | | | | |
| 3. Distributive justice | 0.38*** | 0.54*** | 1.00 | | | | |
| 4. Feedback relevance | 0.53*** | 0.49*** | 0.37*** | 1.00 | | | |
| 5. Feedback acceptance | 0.56*** | 0.73*** | 0.629*** | 0.58*** | 1.00 | | |
| 6. Willingness to use the inspection feedback received | 0.35*** | 0.28** | 0.36*** | 0.35*** | 0.36*** | 1.00 | |
| 7. Awareness gained from the inspection feedback received | 0.33** | 0.08 | -0.06 | 0.16 | 0.07 | 0.21* | 1.00 |

Note: *** p<.001, **p < .01, *p < .05

# GENERAL CONCLUSION AND DISCUSSION

*Main findings, implications, limitations and suggestions for future research*

**ABSTRACT** *In this chapter, we first recapitulate the rationale and research aims of this dissertation. Next, we summarise and discuss the main outcomes of this work. We reflect on the limitations and discuss directions for further research. At the end of this chapter, we conclude with the implications of this research for policy and practice.*

## 1. Rationale and research aims

In most European countries, schools are inspected based on the rationale that inspections contribute to quality assurance and quality development in schools through their purposes of accountability and school improvement (Gärtner et al., 2014). Some educational stakeholders consider teacher change (i.e. changes in teachers' thinking and classroom behaviour) through the mechanism of inspection feedback as a third purpose of school inspections (Nelson & Ehren, 2014). While a fair amount of research interest has been devoted to examining whether and how inspections enhance school development (e.g. Ehren et al., 2015; Gustafsson et al., 2015; Penninckx et al., 2016), up till now it has remained largely unclear whether and how inspections stimulate teacher change through the mechanism of providing inspection feedback to teachers. More specifically, in many educational systems inspectors are not allowed to provide interpersonal feedback to teachers and provide only feedback at the school organisational level. Therefore, the question remains whether and how teachers perceive inspection feedback as a tool to improve their performance. Moreover, the extent to which teachers are willing to use this feedback to engage in change processes has not been examined yet (Penninckx & Vanhoof, 2016).

Studies in organisational psychology point to the importance of the interplay between individuals' cognitive responses, affective responses and feedback acceptance on their willingness to use the feedback received (Ilgen et al., 1979; Kinicki et al., 2004). In this dissertation, cognitive responses refer to an individual's thoughts regarding source credibility (expertise and trustworthiness), feedback fairness (distributive and procedural justice), and features of feedback (feedback sign, constructiveness, clarity, and relevance) (e.g. Brett & Atwater, 2001; Greller & Herold, 1975; Ilgen et al., 1979; Leung et al., 2001). Affective responses to feedback refer to how the feedback makes a recipient feel in terms of emotions (Chen et al., 2017). While research has been conducted on the emotional side effects of school inspections on teachers (see Penninckx & Vanhoof, 2015 for a review), such as the experience of stress, anxiety, and anger, less is known about the role of teachers' perceptions regarding inspector credibility, organisational justice and characteristics of inspection feedback. In addition, previous inspection research has not integrated the relationship between these responses and teachers'

acceptance of inspection feedback, which has resulted in a limited understanding of the value of inspection feedback for teacher change.

This dissertation contributes to the understanding of the determinants and consequences of teachers' feedback acceptance. More precisely, the current dissertation examined the role of teachers' cognitive and affective responses regarding inspection feedback and the relationship of these responses between teachers' acceptance of and willingness to use this feedback. To this end, two overarching research questions were addressed: (1) Which cognitive and affective responses do teachers experience with regard to school inspection feedback? and (2) How does the interplay between teachers' cognitive responses and affective responses shape teachers' feedback acceptance and willingness to use inspection feedback?

Four studies were conducted with teachers in primary schools that were recently inspected. More specifically, in study 1, we drew on data from 21 in-depth interviews with teachers in eight primary schools in order to explore the nature of teachers' cognitive and affective responses to school inspection feedback in relation to feedback acceptance. In study 2, we adopted a convergent mixed methods design and collected both quantitative and qualitative data among 361 primary school teachers. Multilevel models were used to interpret and compare teachers' emotional responses to school inspections, while the open-ended questions added contextual information to the quantitative measurements. In study 3 and study 4, we investigated the existence and strength of relationships between teachers' cognitive and affective responses and their acceptance of and willingness to use the inspection feedback received, alongside other variables that were expected to be relevant. In order to test the hypothesised relationships, path analyses were conducted using Structural Equation Modelling (SEM). The sample of study 3 and study 4 consisted of 687 teachers from 80 recently inspected schools who received a favourable inspection outcome. An overview of the variables used in this dissertation can be found in Tabel 1. For a more complete theoretical background of this dissertation, we refer to the General Introduction (sections 1.1 – 1.6).

## 2. General conclusions and discussion

Based on the results of the studies in the present dissertation, several conclusions can be drawn. In the following sections, we will discuss the main findings in reference to the two central research questions

**Table 1.** Overview of the different variables used in this dissertation

| Concept | Definition |
|---|---|
| ***Inspector credibility*** | |
| **Expertise (knowledge)** | The degree to which an inspector is perceived as capable of making accurate assertions. |
| **Trustworthiness** | The degree to which a teacher trusts an inspector's intentions and motives, free from biasing factors, at the time of feedback (adapted from Steelman & Rutkowski, 2004). |
| ***Organisational justice*** | |
| **Procedural justice** | The perceived fairness of the inspection process in which information was gathered to determine the outcomes (adapted from Colquitt, 2001). |
| **Distributive justice** | The perceived fairness of the inspection outcome. |
| ***Characteristics of feedback content*** | |
| **Feedback constructiveness** | The extent to which inspection feedback is perceived as elaborate and constructive. |
| **Feedback clarity** | The extent to which the feedback message is perceived as straightforward and direct, as opposed to ambiguous and open to interpretation (Geddes & Linnehan, 1996). |
| **Feedback relevance** | Teachers' perceptions of information significance. |
| ***Individual teacher characteristics*** | |
| **Feedback Utility** | Teachers' perceptions of the perceived utility of feedback in general. |
| **Feedback self-efficacy** | Teachers' perceived competence to interpret and respond to feedback appropriately |
| **Teacher self-efficacy** | Teachers' perception of their ability to (a) perform required professional tasks and to regulate relations involved in the process of teaching and educating students (classroom effects) and (b) perform organisational tasks, become part of the organisation and its political and social processes (organisational effects) (Friedman & Kass, 2002) |
| **Self-esteem** | The overall value that a teacher places on themselves as a person. |
| ***Other concepts*** | |
| **Feedback acceptance** | Teachers' perceptions about the accuracy of the inspection feedback received |
| **Teachers' willingness to use the inspection feedback received** | Teachers' desire to perform better on areas addressed in the inspection feedback received. |
| **Teachers' awareness gained from the inspection feedback** | Teachers' perceptions that the inspection feedback received has contributed to a better understanding of the different aspects of learning and teaching practices at school and teacher levels |

## 2.1 Teachers' cognitive and affective responses regarding inspection feedback

The first part of the dissertation was aimed at obtaining a deeper understanding of which cognitive and affective responses were experienced by teachers regarding the feedback they received during an inspection visit.

### *2.1.1 Teachers' cognitive responses regarding inspection feedback*

***Teachers have positive perceptions regarding inspector credibility and organisational justice, but request more constructive and clear feedback.***

Based on the literature, the concept of **inspector credibility** was split into two dimensions: *expertise* and *trustworthiness* (Brinko, 1993). The findings of study 1 and study 2 illustrated that a teacher's perception of inspector trustworthiness depended largely on their description of the inspector's attitude and communication style. Inspectors who communicated in a manner that encouraged an open, honest and respectful dialogue were considered more credible compared to inspectors who displayed an arrogant and disrespectful attitude. In line with Baxter (2013), being out of touch with current practices in education was a common criticism of school inspectors. The quantitative results of study 3 revealed, however, that teachers in general perceived the inspectors' expertise and trustworthiness largely as positive.

Regarding **organisational justice**, study 3 demonstrated that teachers considered both the inspection process (*procedural justice*) and the inspection outcome (*distributive justice*) to be fair. These positive findings were in contrast with the findings of study 1, in which some of the teachers accused the inspectors of being inconsistent and biased in their decision making. Evidence-based recommendations and transparent procedures augmented teachers' perceptions of procedural justice. Teachers tended to compare their inspection outcome and feedback to those of referent schools. Negative perceptions of distributive justice were reinforced when 'misleading' schools (i.e. schools that intentionally adapted lessons or materials) received a better inspection outcome (positive outcome versus a restricted positive outcome). These findings corroborate previous research indicating that teachers' justice perceptions are lower in schools with an identified shortcoming (e.g. Wilcox & Gray, 1996; Wurster & Gärtner, 2011).

Consistent with the findings of studies on **feedback characteristics** in the field of inspection research (McNamara & O'Hara, 2008; Penninckx, 2015), our studies showed that inspection feedback is often perceived as either too vague or too general to be of use. Teachers also expressed their preference for more constructive inspection feedback. Inspection feedback was

considered to be relevant when it was related to the classroom level and the core activities of teaching. In line with findings from recent studies (Penninckx et al., 2014; Dobbelaer et al., 2017), the results of study 1 showed that the majority of the teachers received small amounts of constructive, oral interpersonnal feedback during debriefing sessions with the inspector. Even though this feedback was mainly targeted at the organisational school level, it included information about teachers' lesson planning, teaching materials and teaching activities. Nevertheless, teachers were generally dissatisfied with the amount of feedback they were receiving.

A possible explanation for these findings is context-specific. In the Flemish education system, school inspectors have no legal right to provide schools with constructive feedback in the form of recommendations or suggestions on how they can address the identified weaknesses (OECD, 2015b). In addition, the inspectors are not allowed to provide individual feedback to teachers or principals either. For this reason, they have to guarantee strict anonymity when the feedback is targeted at teacher level (OECD, 2015b).

Overall, the results from our studies demonstrate that teachers' cognitive responses to inspector credibility and organisational justice are largely positive. Nevertheless, teachers request more constructive and clear feedback. As previous findings in other studies indicate that constructive advice is an important driver of school development (Ehren & Visscher, 2008; Macbeath, 2006, Matthews & Sammons, 2004), we believe it is important to emphasise teachers' need for this type of feedback.

### *2.1.2 Teachers' affective responses regarding inspection feedback*

***Regarding the inspection visit, teachers mainly report emotions of joy, followed by surprise. Emotions of anger and sadness are hardly found.***

This dissertation expanded upon earlier research on emotional side effects of school inspections (see Penninckx & Vanhoof, 2015 for a review) with the present findings providing a further understanding of teachers' affective responses to inspection feedback. It provided an answer to questions raised previously, i.e. whether school inspections elicit emotions of joy and happiness as well as whether the research community has neglected to report these emotions (Penninckx & Vanhoof, 2015). As stated previously, it was also important to move beyond the measurement of merely teachers' stress as an emotional response, as this has led to a limited view of emotions experienced (Lazarus, 2001). To the best of our knowledge, this dissertation was the first to

examine the presence and intensity of a broad range—or as the title of the second study suggests, the full array—of affective responses among teachers in recently inspected schools.

In study 1, teachers described 15 different affective responses that could be categorized into joy, anger, and sadness—three of the six primary emotion categories of Parrott's classification (2001). Respondents did not report any emotions of love, surprise, or fear. When feedback indicated a need for change in a specific area beyond the respondents' responsibility, it seemed to be processed with little emotional engagement.

The quantitative results in study 2 gave a different impression of teachers' experienced emotions as our results revealed that teachers experienced mainly emotions of joy, followed by surprise, with regard to the introductory meeting, their conversation with the inspector, and the final inspection outcome. In line with Penninckx (2015), teachers' inexperience and their uncertainty of what is about to happen ('the fear of the unknown') lead to an experience of fear during the introductory meeting and the inspection meeting. In contrast to the evidence collected in earlier school inspection research, the very low presence of anger and sadness regarding these moments was one of this dissertation's most substantial findings. Our findings shed a different light on the discussion on the dominant presence of negative emotions in inspection research (Penninckx & Vanhoof, 2015) and demonstrate the need to include a more extensive set of emotions in future research.

These findings contribute to the existing knowledge base by showing that the Flemish inspection approach seems to facilitate teachers' experience of predominantly positive emotions. An explanation for the dominant presence of these emotions is found in the broader literature on emotion research, which indicates that providing positive feedback generally leads to the experience of pride and happiness, while negative feedback generally results in the experience of disappointment or anger (e.g. Lazarus, 1991). Researchers in the field of school inspections have suggested that an unfavourable inspection judgement is often linked to the observation of negative emotions in schools (e.g. Jeffrey & Woods, 1996; Perryman, 2007; Scanlon, 1999). Although almost 96% of the inspected primary schools in our studies had received a positive inspection outcome, we must be aware that the exclusion of schools with a negative inspection outcome may have drawn a more positive image. In addition, our findings also provide support for the thesis that teachers tend to respond more emotionally in a high-stakes inspection context compared to a low-stakes context (Ehren, 2014; Jones et al., 2014). From the perspective of the Flemish teachers, school inspection outcomes have few personal consequences—such as the risk of losing their jobs—when the school is judged to be failing, and could thus be considered as

less high-stakes and less relevant for teachers' personal goals (OECD, 2013; van Bruggen, 2010). Of course, as these explanations are tentative, future research should examine whether further support can be found for them.

### 2.2 How does the interplay between teachers' cognitive and affective responses shape teachers' feedback acceptance and willingness to use inspection feedback?

Our second research question aimed to increase our understanding of how cognitive responses and affective responses are related to teachers' feedback acceptance and their willingness to use inspection feedback. Using large-scale survey data, study 3 and study 4 investigated the determinants of teachers' willingness to use the inspection feedback received. A model was developed based on previous research and theory (Ilgen et al., 1979; Fedor, 1991; Plunier et al., 2013) which attempted to explicate how affective responses, cognitive responses, feedback acceptance, awareness gained from the feedback received, individual teacher characteristics and teachers' willingness to use the inspection feedback received relate to each other. A combination of the insights of study 3 and study 4 allows us to construe an overview of the relationships between these variables. Figure 2 illustrates the main findings which emerged from the results of these studies and represents the processes that teachers go through when receiving inspection feedback. In this section, we specify our findings regarding the different relationships.

The descriptive results showed that, in contrast to previous studies (e.g., Chapman, 2001; Gärtner et al., 2014), teachers largely accept the inspection feedback and state that they are willing to use this feedback to alter their teaching and evaluation practices.

***Teachers' affective responses are mainly related to their cognitive responses regarding inspector credibility, organisational justice and feedback relevance.***

Consistent with appraisal theory, the quantitative findings in study 2 show that affective responses on teacher level vary more than affective responses on school level. These findings confirm the assumption that the appraisal of the same event can cause different emotions in individual people (e.g. Lazarus, 1991; Sander, 2013). In other words, though the inspection team, the procedures, and the inspection outcome were similar, the overall intensity of affective responses varied between teachers in the same school.

The qualitative analysis of the interviews conducted in study 1 and the open-ended questions from study 2 shows that teachers' cognitive responses towards the different moments of the school inspection visit do indeed explain most of the differences in their affective responses. In

both studies, for instance, teachers' experiences of happiness and satisfaction were related to the receipt of constructive feedback and a positive inspection outcome. Unclear feedback and a negative inspection attitude, on the other hand, proved to be a source of frustration. When the feedback was largely negative, emotions of sadness were reported among the teachers.

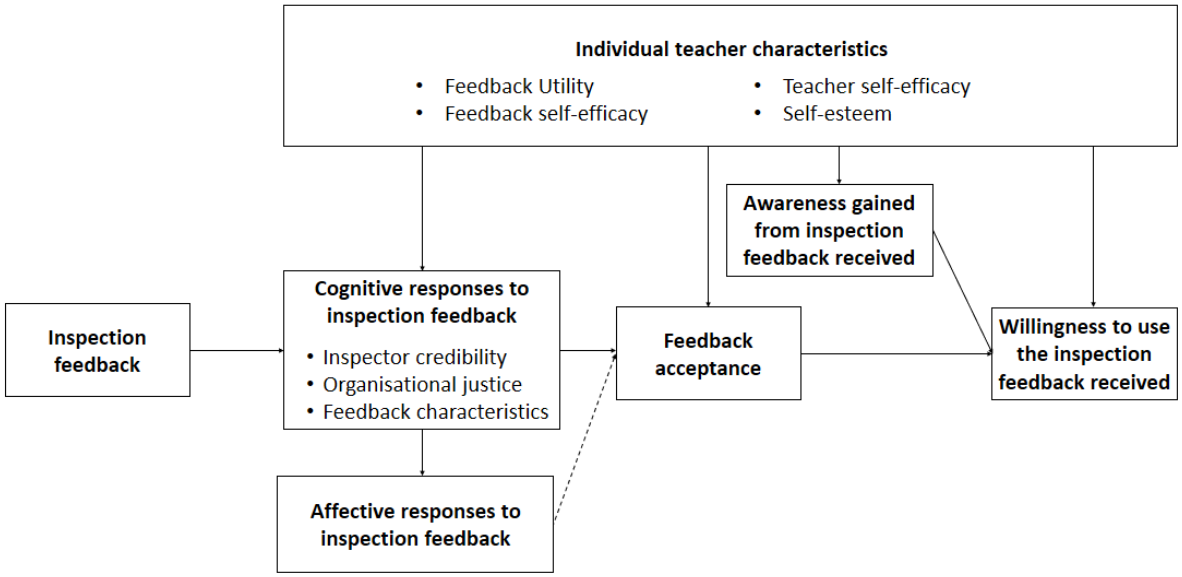


Figure 2. Teachers' processing of inspection feedback model

These findings served as the basis for study 3 in which the relationship between teachers' cognitive and affective responses was investigated quantitatively. Our results show that some of the hypothesised relationships between teachers' cognitive and affective responses are confirmed as statistically significant. The strongest positive relationships were found between joy and distributive justice, while the strongest negative relationships were found between sadness and trustworthiness on the one hand and anger and trustworthiness on the other hand. In other words, the more teachers perceive the inspection outcome as a fair result (distributive justice), the more they report emotions of joy, while negative perceptions of the inspectors' trustworthiness are related to teachers' experience of anger and sadness.

The moderately positive relationships between anger and feedback relevance on the one hand and between sadness and feedback relevance on the other hand, demonstrate that the more teachers considered the inspection feedback to be relevant, the more they said they responded emotionally to the feedback. These results are in line with appraisal theory, suggesting that events appraised as relevant to an individual's goals will lead to the occurrence of emotions (Roseman & Smith, 2001; Smith & Lazarus, 1990). As such, this dissertation is a valuable contribution to the evidence base on the relationship between emotion and cognition because

it shows that there is a relationship between teachers' cognitive responses regarding the relevance of inspection feedback and the emotions they experience during a school inspection.

***Teachers' affective responses are only to a very small extent related to teachers' acceptance of inspection feedback.***

Our hypothesis regarding the mediating role of teachers' affective responses in the relationship between cognitive responses and feedback acceptance could only be confirmed to a very small extent. Whereas teachers' emotions of joy and sadness are not directly related to feedback acceptance, a direct but very small negative relationship between anger and feedback acceptance was found. We cautiously conclude that these results are in line with prior research that revealed that the presence of negative emotions can obstruct feedback acceptance (e.g. Anseel et al., 2011; Brett & Atwater, 2001), although future research is necessary to further examine this relationship. In addition, although our findings suggest that cognitive responses are antecedents of teachers' affective responses, emotion research indicates that there is evidence for a reciprocal relationship in which emotions can influence cognition just as cognition can shape emotions (Dolcos, Iordan, & Dolcos, 2011; Izard, 2009; Swann & Schroeder, 1995). It is, therefore, necessary that future research goes more in depth on the existence of a reciprocal interaction between emotion and cognition in the context of school inspection research.

***Accepting the inspection feedback does not automatically lead to a greater willingness of teachers to use the inspection feedback received.***

We found that feedback acceptance bears only a very small significantly positive relationship to teachers' willingness to use the inspection feedback received. Although in their model, Ilgen et al. (1979) assume that an individual's willingness to use the feedback is determined by their acceptance of the feedback, this assumption is not corroborated by the studies included in this dissertation. This small relationship, however, is an indication that the extent to which teachers are willing to use the inspection feedback received can be explained by other factors.

***The role of teacher awareness regarding aspects of their learning and teaching practices in teachers' feedback processing model is rather small.***

Based on research in the field of psychology (Plunier et al., 2013), teachers' awareness gained from the inspection feedback received was one of the factors that we assumed relates to teachers' willingness to use the inspection feedback received. Nevertheless, based on our findings, we expect that the overall role of teacher awareness gained from the inspection feedback is rather

small, as we found only a very small positive relationship between these two variables. In line with earlier research, the descriptive results of study 4 showed that teachers generally respond rather neutrally to the question of whether the inspection feedback raised their awareness regarding aspects of their learning and teaching practices (Gaertner et al., 2011; McCrone et al., 2007; Penninckx, 2016). In accordance with Landwehr (2011), the purpose of the Flemish inspection is not necessarily to generate new insights for improving the school's quality and teachers' practices, but to acknowledge, confirm and point out existing problems officially within and outside the school by making these problems explicit in the openly published inspection report. Future research should, therefore, focus on the question of whether the official publication of the shortcomings outweighs the increase in teachers' awareness gained from the inspection feedback received when explaining teachers' willingness to use the inspection feedback.

***Teachers' cognitive responses regarding feedback relevance are directly and indirectly related to teachers' willingness to use the inspection feedback received.***

Regarding the relationship between teachers' cognitive responses and their willingness to use the inspection feedback received, our results primarily demonstrate that feedback relevance seems to be an important predictor of teachers' willingness to use the inspection feedback received. Alongside the indirect relationship between feedback relevance and teachers' willingness to use the inspection feedback received (through feedback acceptance and through awareness gained from the feedback received), we also found a direct positive relationship between these variables. Our findings are in line with previous research that indicates that teachers accept feedback more easily and are more likely to change their behaviour, when the content is relevant and consistent with their goals and expectations (Dobbelaer et al., 2017; Ehren & Visscher, 2008).

According to our results, teachers' cognitive responses regarding procedural and distributive justice were not directly related to their willingness to use the inspection feedback, although they were indirectly related through feedback acceptance. In other words, the more teachers perceived the inspection process and inspection outcome to be fair, the more they said they accepted the inspection feedback, and the more they said that they were willing to use the inspection feedback received. The impact of the perceived inspection quality, an umbrella term for the quality of the inspector's behaviour, the inspection's psychometric quality, and/or the transparency of the inspection, has been substantiated in a previous study by Penninckx et al. (2016). Their results showed that more conceptual and instrumental effects are reported by

teachers who perceive the inspection process as high in quality. This dissertation extends these insights by specifying that feedback relevance and perceptions of organisational justice are strongly related to teachers' processing of inspection feedback.

Based on previous research on feedback acceptance (Brett & Atwater, 2001; Lee & Akhtar, 1996; Steelman & Rutkowksi, 2004) we expected inspector credibility to be an important determinant of teachers' subsequent reactions to feedback in terms of feedback acceptance. Remarkably, our findings did not confirm this, as we did not find a direct statistically significant relationship between trustworthiness and feedback acceptance (study 3 and study 4), or between expertise and feedback acceptance (study 3). A possible explanation for this finding is that the variations in organisational justice and feedback relevance were stronger in relation to feedback acceptance than the variations in trustworthiness and expertise. In addition, our findings did not confirm a direct relationship between feedback constructiveness and teachers' feedback acceptance, or between feedback clarity and feedback acceptance, even though many studies in inspection research emphasise these two feedback characteristics as primary reasons for conceptual and instrumental effects (e.g. Ehren & Visscher, 2008; Gray & Gardner, 1999; McBeath, 2006; Penninckx, 2015; Wurster & Gärtner, 2011).

***Higher levels of feedback utility (teachers' perceived utility of feedback in general) are a lever for teachers' willingness to use the inspection feedback.***

The results confirmed our hypotheses regarding individual teacher characteristics only partially. We found that feedback utility relates to feedback acceptance and willingness to use the inspection feedback directly as well as indirectly through teachers' cognitive responses and awareness gained from the inspection feedback. The more teachers take a positive stance towards the usefulness of feedback in general, the more they say they accept inspection feedback and are willing to use the inspection feedback received. It is to be noted, however, that these relationships are rather small. Regarding feedback self-efficacy, teacher self-efficacy and self-esteem, no direct statistically significant relationships were found between these variables and feedback acceptance and teachers' willingness to use the inspection feedback received.

With this model, we stress the need to adopt an integrated approach when studying teacher change through the mechanism of providing inspection feedback. Since research on the determinants of teachers' feedback acceptance and their willingness to use the inspection feedback is relatively new, it is advisable to continue research in which quantitative and qualitative methods are used to collect information in order to replicate our findings and

broaden the scope of existing knowledge. We, therefore, consider the model as a basic model for future research that can be adapted or expanded in accordance with the context-specific characteristics of the education system in which it is used. Some hypotheses about alternative explanations that are related to teachers' processing of inspection feedback are incorporated in the directions for future research discussed below.

## 3. Limitations and directions for further research

While the previous sections pointed towards the findings of this dissertation, there are some limitations to acknowledge on which we will reflect in the concluding pages of this dissertation. After all, these limitations point to intriguing research opportunities and can thus serve as an inspiration for future studies.

### 3.1 Limitations

A first limitation concerns the sampling of the respondents, as the way schools respond to the inspection feedback may depend upon the nature of the inspection findings (Standaert, 2000). The empirical evidence provided in this dissertation was collected solely from schools that had received either a (restricted) positive judgement (study 1) or a favourable opinion (studies 2–4). No schools with a negative inspection judgement or unfavourable opinion participated in the qualitative and quantitative studies. School leaders in the latter schools refused to participate, stating they did not want to cause (additional) stress and anxiety among their teaching staff after the school inspection. Although most primary schools in Flanders do receive a favourable (positive) inspection outcome (96% in 2018), this outcome does not imply that inspectors do not provide feedback on the identified shortcomings and potential areas for school development. However, the exclusion of schools with negative inspection outcomes may have biased our studies to a certain extent. Teachers in schools with a negative inspection outcome might show different responses and reactions to the feedback received. Therefore, we suggest that future research should focus on schools that received a negative inspection outcome. Still, further studies should take into account that differences in inspection feedback (as described in this dissertation) may generate variation in teachers' responses to the inspection outcome. Furthermore, as Inspection 2.0 is the new inspection approach in Flanders since January 2018, our results remain somewhat context dependent as teachers possibly compared the new inspection approach with the old approach. Therefore, research over a longer period is needed to generalise and deepen the findings of this dissertation. Another recurring limitation across all of the studies concerning the sample bias is the exclusion of teachers in secondary schools, as only teachers in primary schools were willing to participate. Research points to the lower

levels of stress of school staff in secondary schools compared to school staff in primary schools, caused by smaller and more focused inspections for different education areas (Gray & Gardner, 1999). Therefore, we would recommend future researchers to broaden the sample to both primary and secondary school teachers.

A second set of limitations pertains to the nature of the data collected in our quantitative studies. We relied on self-reported data from a large-scale sample, as self-report methods are the most efficient and easiest technique for measuring emotions and perceptions (Larsen & Fredrickson, 1999). In order to compensate for the limitations of self-report data, triangulation of qualitative and quantitative methods was used to ensure other data sources were tapped into as well (Flick, 2018). It should be noted, however, that there is a general tendency in self-report research for respondents to give socially desirable answers (Paulhus, 2017; Pekrun, 2016). Also, the retrospective nature of our data has its limitations, since recall-based ratings of emotions and perceptions are filtered through memory. Therefore, the issue of memory distortion must be acknowledged. We believe future research on teachers' emotions regarding inspection feedback could use emotion measurements with physiological recording devices (wearable sensors) or observations (real-life or video records) in addition to self-reports in order to maximise validity and accuracy. Finally, school inspection research rarely includes the perspectives of other stakeholders, such as pupils, parents, or even school counsellors (de Wolf & Janssens, 2007; Kotthoff, 2003). By participating in interviews or focus group discussions, for instance, parents and students might be able to add a different perspective regarding the effects or consequences of school inspections on teacher change, school development, and student achievement.

A third limitation concerns the cross-sectional research design of this dissertation. Similar to most existing studies in the field of inspection research, this dissertation incorporates cross-sectional research and thus does not allow for causal arguments. In order to understand the long-term effects of providing inspection feedback to teachers, further research on school inspections would benefit from a longitudinal research design. More precisely, to measure the degree to which inspection feedback contributes to teacher change or quality development in schools, empirical studies should include at least two reference points of time (repeated measurement), but should also be conducted over a longer period of time (Coe, 2002). A repeated measure design has, for example, the potential to compare teachers' classroom activities and teaching strategies before (pretest) and after a school inspection (post test), after controlling for teachers' feedback acceptance. It would also provide an interesting base to investigate the reciprocal relationship between, for example, feedback acceptance and feedback

use as it is not unlikely that feedback acceptance would influence feedback use, and that the use of feedback would influence feedback acceptance when the feedback is indeed perceived as useful.

A final limitation concerns the setting in which inspection feedback is provided. A recent comparative study that summarised differences and commonalities between the various approaches of Inspectorates of Education (Ehren et al., 2013) acknowledged the importance of the consequences of school inspections for schools and the school staff, such as sanctions or public reporting of the inspection results. School inspections become high-stakes when the results lead to serious sanctions for at least one of the stakeholders, such as financial sanctions, interventions, or publicly naming the school (as a result of the publication of the inspection findings). From this perspective, the Flemish education system is considered to be a low-stakes environment (Van Bruggen, 2010). Recent studies on the effects of school inspections have argued that teachers are more likely to accept inspection feedback in low-stakes systems than in high-stakes systems (Ehren et al., 2015; Altrichter & Kemethofer, 2015; Kemethofer et al., 2017). However, these studies did not shed any light on the question whether the incentives behind the inspection system might increase teachers' cognitive and affective responses to inspection feedback, as well as their willingness to use the inspection feedback. Future research would benefit from including teachers in both high-stakes and low-stakes settings to further examine this.

### 3.2 Directions for further research

A key question for future consideration remains whether teacher change can be stimulated through the mechanism of school inspection feedback. As outlined above, providing teachers with inspection feedback does not automatically lead them to a better understanding of the various aspects of learning and teaching practices at the school or teacher level. Therefore, teacher change may not necessarily relate directly to the receipt of inspection feedback, but it may be related to the processes initiated by the official publication of the inspection report (Landwehr, 2011). Comparing the outcomes of the schools' self-evaluation reports and/or the content of their action plans before and after an inspection visit could provide more insight into the role of the inspection report.

We learned that most teachers perceived the debriefing after the classroom observations as the most powerful feedback moment during a school inspection visit and that they seemed to desire more individual feedback from the inspectors. In line with research that indicates that feedback

from a source of higher status has a higher perceived instrumental value (Anseel et al., 2015; Fedor, Rensvold, & Adams, 1992; Levy, Cober, & Miller, 2002), questions to further pursue are whether inspection feedback is perceived by the teacher to be superior to feedback from school leaders, colleagues or school counsellors, or whether teachers' desire to receive individual inspection feedback stems from a lack of feedback culture in schools (Ehren et al., 2013; TALIS, 2014). Therefore, we recommend empirical research oriented towards examining the perceived value of the different feedback sources that teachers can rely on.

A third avenue for future research concerns the individual teacher characteristics that can be taken into account when investigating teachers' responses to inspection feedback. At the teacher level, research on feedback effects has made important contributions to understanding how, for example, external locus-of-control elements (financial incentives, competition), emotional stability, and feedback-seeking behaviour influence feedback acceptance and feedback use (e.g. Judge & Bono, 2000; Lefcourt, 2014). We did not collect data on teachers' personal beliefs about the expected inspection outcome, so we do not know whether these beliefs affected our findings. This could be considered in further research.

Finally, as teacher change does not take place in a vacuum, contextual factors of the educational system and the school environment may also explain differences in feedback acceptance and teachers' willingness to use the inspection feedback received. Contextual factors of the educational system that can be considered include consequences of school inspections at the teacher and school levels (rewards or sanctions), public reporting (or ranking), and the presence or absence of standardised tests (Dedering & Muller, 2011; Ehren, 2016). Regarding the contextual factors of the school environment—which includes school and leadership characteristics—previous work in the field of inspection research has addressed the significance of schools' policy-making capacities regarding the emotional impact of inspections (Penninckx et al., 2014). In addition, Standaert (2000) and Ehren et al. (2015) referred to school culture and innovation capacity as important conditions for implementing change. The stance of school leaders towards the school team and the inspection process is another factor that should be considered as researchers point to the importance of school leaders in engaging teachers in improvement initiatives (Murphy et al., 2013). In school inspection research, school leaders are often considered a driving force for the utilisation of inspection feedback (Matthews & Sammons, 2004; Scanlon, 1999). Brimblecombe et al. (1996), for example, suggest that when school leaders prepare their team for an upcoming inspection, teachers are more likely to change their professional behaviour afterwards as a result of the inspection.

## 4. Contributions to the research field

Despite these limitations, this dissertation adds to the existing knowledge base about teachers' cognitive and affective responses regarding inspection feedback and how these responses contribute to teachers' acceptance of and willingness to use the feedback received. In the following sections, the central theoretical and methodological lessons learned are summarised.

### *Unravelling the conceptualisation and measurement of teachers' cognitive responses and reactions to feedback*

Previous studies challenged the independence of various feedback characteristics and demonstrated that feedback sign, specificity, frequency and perceived accuracy of feedback (i.e. feedback acceptance, Ilgen et al., 1979) were highly related, which made them empirically indistinguishable (Larson, 1984; Kidwell & Bennett, 1994). As a result, some studies applied an overarching concept that included all of these variables (e.g. Kinicki et al., 2004). Recent studies in the field of inspection research showed similar limitations. Penninckx et al. (2016) used the label 'inspection quality' as an umbrella term for the quality of the inspector's behaviour, the inspection's psychometric quality, and/or the transparency of the inspection (Penninckx et al., 2016), while Behnke and Steins (2016) did not specify which feedback characteristics were included in their conceptualisation of 'feedback quality'.

This dissertation unravelled the differences and similarities between the concepts to clarify their meaning and interrelatedness. Teachers' cognitive responses (trustworthiness, expertise, procedural justice, distributive justice, feedback constructiveness, feedback clarity, and feedback relevance) and their reactions to the inspection feedback (feedback acceptance, awareness gained from the inspection feedback received, and willingness to use the inspection feedback received) were investigated quantitatively by using questionnaire data. The validation of the survey instrument, as discussed in study 3 and study 4, confirmed that each scale measured one and only one theoretical concept and that the variance across indicators of different concepts was due to conceptual differences and not due to measurement issues. As such, this dissertation contributes to the conceptual clarification of teachers' cognitive responses and reactions to inspection feedback. As the questionnaire was administered and validated in Dutch, future research needs to translate and validate the instrument in other languages to establish the degree of validity and reliability across the different inspection contexts.

### *A more comprehensive picture of teachers' emotions during an inspection visit*

The negative emotional side effects of school inspections on the teaching staff have been extensively studied (for a review, see Penninckx & Vanhoof, 2015). More specifically, a lot of attention has been devoted to teachers' stress and anxiety and their consequences on teachers' mental health, absenteeism, and self-confidence (e.g. Ferguson et al., 1998; Jeffrey & Woods, 1996; Scanlon, 1999). Conversely, only a minority of studies on school inspections discuss positive emotions such as satisfaction, relief, euphoria, and pride among teachers (McCrone et al., 2007; Ofsted, 2007). As these findings raised the questions of whether school inspections elicit emotions of joy and happiness or whether the research community has neglected to report these emotions (Penninckx & Vanhoof, 2015), this dissertation called attention to the presence of emotions of joy, surprise, anger, sadness, and fear and the role of these emotions on teachers' feedback acceptance. As a result, this dissertation highlighted the dominant presence of teachers' emotions of joy regarding the Flemish inspection and calls further attention of scholars in the field of inspection research to examine a more extensive set of emotions rather than staying focused on teacher anxiety and stress.

In order to investigate teachers' affective responses to inspection feedback, we used Parrott's emotion classification (2001). Although this classification has been employed in educational emotion research before (e.g. Bahia et al.,2013; Chen, 2016), it has never been appropriately validated in the context of inspection research. Based on the first study, 13 emotions were selected and divided into the following primary emotion categories: (1) joy: satisfaction, relief, and pride; (2) anger: anger, frustration, and annoyance; (3) sadness: hurt, unhappiness, disappointment, humiliation, and dejection; (4) surprise; and (5) fear. However, exploratory factor analysis of the scale resulted in only three remaining items for sadness (hurt, humiliation, and dejection) and two items for anger (frustration and annoyance) in study 2. In study 3, we measured anger with a three-item scale that included anger, frustration, and annoyance. Our data could thus not confirm the classification of Parrott completely. One of the possible explanations is that emotions are likely to be culturally embedded and context-specific. Wierzbicka (1992) states that emotions such as happiness, fear or anger, are cultural artefacts of the English language. They may have a different meaning in the Dutch language and Flemish culture. Therefore, we want to emphasise that future research in the inspection context should take cultural and linguistic differences in the translation of the emotions in the survey instrument into account.

### *Mixed methods design: capturing the complexity of teachers' processing of inspection feedback*

This dissertation combined qualitative and quantitative research methods in order to create an in-depth understanding of teachers' responses and reactions to inspection feedback. Many studies performed on the emotional side effects of school inspections among teachers have used small samples and qualitative methods (see Penninckx & Vanhoof, 2015 for a review). As qualitative research is used mainly for enhancing understanding of complex issues, it has less potential for generalisation of the results (Marshall, 1996). For completeness purposes, researchers recommend complementing qualitative data with quantitative data (Creswell & Clark, 2017). In this dissertation, steps in this direction have been taken.

The overall aim of this dissertation was to examine how teachers process inspection feedback in order to understand when and how teachers are accepting and willing to use the feedback (or not) and what factors influence those interpretations. To gain a deeper understanding of the variables that were expected to be relevant to teachers' feedback processing, we first used a qualitative approach. By using semi-structured interviews (study 2) and open-ended survey questions (study 2), we shed more light on teachers' cognitive and affective responses. After that, our findings were expanded on a large scale using closed-ended survey questions (study 2–4). We would advise scholars in the field of inspection research to employ mixed-methods designs to collect information, as data obtained by way of different and complementary methods can further enhance our understanding of teachers' processing of inspection feedback.

### *The role of teachers' cognitive and affective responses on feedback acceptance: lessons from organisational psychology*

For a better understanding of teachers' individual acceptance of inspection feedback, we argued that there is a need to combine insights from previous inspection studies with feedback research in the field of organisational psychology. Based on the model of Ilgen et al. (19179), and literature on appraisal theory (e.g. Lazarus, 1991; Sander, 2013), we developed a theoretical feedback model from which assumptions about teachers' individual acceptance of and their willingness to use inspection feedback were derived. Hence, this dissertation contributes to the literature of teachers' cognitive and affective responses, and their subsequent reactions to inspection feedback (feedback acceptance and the willingness to use inspection feedback) by exploring the relationships between these constructs. As such, our results show that greater awareness of the work being done by organisational psychologists might serve as a basis for further research in inspection contexts.

## 5. Practical implications

The present dissertation has increased our understanding of teachers' cognitive and affective responses and their reactions to inspection feedback. The insights offer valuable implications for inspectors, policy-makers, and school practitioners.

### *Strengthen teachers' perceptions of organisational justice*

Our findings support the notion that teachers' feedback acceptance and emotions are inseparably tied to, and cannot be separated from, the conditions under which a school inspection takes place. The fact that cognitive responses are important regarding teachers' acceptance of and their willingness to use the inspection feedback is interesting and encouraging. From the perspective of a school inspector, understanding that teachers' impressions of your behaviour and decision-making activities are strongly related to their acceptance of the feedback they receive, is an important step. A first set of practical implications can be derived from the findings of studies 1 to 4, which took the role of organisational justice in teachers' processing of inspection feedback into account. We can reiterate the first recommendation put forward by Penninckx (2016) in his work about the effects and side effects of school inspections, namely the need to '*strengthen the perceived inspection quality*'.

The importance of organisational justice has been highlighted multiple times in the findings of our studies. In this dissertation, it refers to the extent to which teachers perceive the inspection process and inspection outcome to be fair (Cropanzano & Greenberg, 1997). As we found a positive relationship between organisational justice and feedback acceptance, it is of the utmost importance that inspectors enhance teachers' fairness perceptions. The positive impression of teachers regarding the introductory moment at the beginning of the inspection visit in which inspectors encourage teachers to understand the procedures and expectations of the inspection visit is a clear sign of teachers' desire for this kind of information. As inspectors' decision-making processes can be perceived by teachers as a black box, it is important for inspectors to ensure that teachers are aware of the procedures and evaluation criteria. Transparency on how findings are weighted and interpreted in the inspectors' judgement is an example of this (McLaughin, 1991). In addition, the results of study 1 highlighted that teachers' perceptions of organisational justice were strengthened when teachers had the opportunity to express their concerns towards the inspection team before the start of the decision-making processes that led to the final inspection outcome.

Furthermore, although we did not find a direct relationship between inspector credibility and teachers' feedback acceptance, previous research has pointed to the strong relationship between organisational justice and source trustworthiness (Colquitt & Rodell, 2011). From the perspective of a school inspection visit, inspectors' behaviour and adherence to principles of justice may influence teachers' perceptions of organisational justice too. It is, therefore, important to invest in training to help school inspectors to unambiguously interpret and apply the procedures and the evaluation criteria that lead to the inspection outcome.

***Feedback relevance is critical for feedback processing***

A second series of recommendations concerns the importance of feedback relevance in the feedback process. In studies 3 and 4, we found that, in general, teachers' acceptance of inspection feedback and their willingness to use it are closely related to the extent to which the inspection feedback is considered relevant. Both the inspectorate and the school board can contribute to the extent to which teachers consider the inspection feedback as relevant.

As Chapman (2001, p. 44) indicates, 'the only situation where teaching and learning could not be improved in a school would be when every lesson observed was awarded a grade one. In reality, this appears unlikely, therefore another lever to generate improvement at the classroom level is necessary.' If school inspectors want to realise the purpose of school and teacher development, their feedback must be perceived as relevant. The inspection report should address the overall shortcomings in the teaching and learning practices of teachers (without harming the anonymity of the teachers), even when these remarks were observed in only one lesson. When shortcomings at the teacher level are highlighted in the inspection report, they become important at the school level too. If such remarks are not included in the inspection report, it is more difficult for the school board to introduce and legitimise innovations or changes.

From the perspective of the school board, it is important to create ownership of the processes of change that are initiated by the inspection at both the teacher and the school level. Many researchers indicate that educational change is the most successful when teachers feel personal ownership and a sense of empowerment (e.g. Fullan, 2011; Goodson & Hargreaves, 1996; Niemi, 2002). Top-down changes of which teachers do not understand the rationale tend to be superficial and short-lived (Parding, 2007; Fullan, 2011). It has been shown that failing schools can benefit more from additional external support than schools that are already on the right track (Potter, Reynolds, & Chapman, 2002). It is then the task of the school board to work

together with the teachers and involve them in the school's decision-making processes to create a shared understanding of the school's values and priorities and shared commitment to its core values. According to MacBeath and Stoll (2002), these conditions are necessary for teachers to get a sense of ownership and to contribute to the change processes.

Creating ownership does not presuppose, however, that teachers are always in a position to recognise what kind of feedback is relevant for them. Studies in the field of psychology have demonstrated that not every individual has the ability to evaluate when information is relevant to them (e.g. Shanteau, 2002), and that it can be useful to involve representatives of local communities to identify potentially relevant information (Dranseika, Piasecki, & Waligora, 2017). In the inspection context, the involvement of parents and students in the inspection process may thus contribute to teachers' perceptions of the relevance of the provided feedback.

***Building bridges between inspection feedback and feedback use***

As we learned from our results, vague inspection feedback without any room for dialogue often creates frustration among teachers. Our findings also showed that there is still room for improvement in the reporting of inspection feedback. These findings suggest some important practical recommendations.

As shown in study 1, teachers often perceive the inspection report as unhelpful as the generalised conclusions are considered as vague and lacking guidance on how to improve (McLaughin, 1991). To enhance feedback clarity, teachers and school leaders need to understand the feedback information as it is intended. Teachers may have different vocabularies and it is up to the inspectors to use an 'everyday' language that is clear and unambiguous to maximise the chances that teachers will understand the feedback. Therefore, it is recommended that the feedback relates to the inspection criteria and that teachers understand why and when a quality area does or does not meet the criteria.

Offering opportunities to meet inspectors during the inspection visit could help teachers to interpret the inspection feedback and could encourage learning through questioning and critically reflecting on current practices. In the literature on learning, Bandura (1986) suggests that reflection enables individuals to evaluate progress toward their goals. School inspectors can support school leaders and teachers' reflective processes to understand the discrepancies between the goals and current levels of their school's quality. According to DeNisi and Kluger (2000), facilitation of feedback can accomplish several tasks, including interpretation of the

feedback context within the context of the organisation, identification of the organisation's needs, and goal setting for change.

The importance of a partnership between inspectors, teachers and school counsellors is illustrated by Fullan (2014), who describes how educational partners who work together in alliances and partnerships, can learn from each other. However, in terms of the developmental function of school inspections, direct partnerships between the school inspectors and the schools are limited by the Flemish legislation, as inspectors have no legal right to provide advice and support to schools (OECD, 2015b). Our qualitative findings show that teachers' desire to respond to inspection feedback is often hindered by the absence of guidelines for initiating and implementing improvement actions. This raises the question of whether there needs to be a closer relationship between school inspectors and teachers, for instance through enhanced cooperation with school counsellors. A possible action is the involvement of different stakeholders throughout the inspection process without intruding on the degree of autonomy granted to the schools or inspectors. In some countries, such as England, inspection teams also include a number of head teachers of high-performing schools. In turn, those teachers are able to use this inspection experience in the development of their own school's quality (Ehren, 2016). From the Flemish perspective, it is not inconceivable that school counsellors, school leaders or teachers could take part in the inspection process. The presence of a school member during, for example, the decision-making process, not only adds to the transparency of the inspection process, but also encourages ownership of the feedback. The presence of a school counsellor during the reflection sessions may help the schools to gain a better understanding of what constitutes good education and how the inspection feedback can be used to enhance school and teacher development, increasing the likelihood that an inspection leads to change.

***Strive towards a feedback-friendly culture***

The fourth series of practical implications concerns the attitude of teachers towards (school inspection) feedback. As our results showed, teachers' fear of the unknown led to fear at the beginning of the inspection visit, but also regarding teachers' conversations with the school inspectors. When inspectors observe lessons, they often create a specific atmosphere that most teachers are not accustomed to (Behnke, 2016). Moreover, in study 4, we found that individual teacher characteristics, such as perceived feedback utility and feedback self-efficacy, were related to how teachers react to the inspection feedback. As the individual's attitude towards feedback depends partially on the support and climate for learning, a strong feedback culture seems crucial for the schools' and teachers' development (Smither & London, 2002). Hence, we

formulate some recommendations for school leaders to shape a feedback-friendly culture in schools.

We believe that it is necessary to install a culture of classroom observation and more informal evaluation settings in schools. According to Behnke (2015), the establishment of team-teaching and co-teaching and attending classes taught by colleagues should enhance systematic reflections on teachers' classroom practices. This may not only lead to the improvement of classroom and teaching instruction, and thus to higher student achievement, but also to a familiarisation with evaluations and classroom observations (Behnke, 2016).

In addition, our results show that individual teacher characteristics are related to teachers' responses and reactions to feedback. More specifically, we noticed that feedback self-efficacy and feedback utility relate to how teachers react upon the inspection feedback. Literature suggests that a positive attitude towards feedback is essential to professional development and learning (London & Smither, 2002). Teachers should be more aware of their attitude towards feedback and should be encouraged to embrace feedback as a learning opportunity. A strong learning goal orientation could help foster resilience to negative feedback and see the feedback as a useful instrument for further improvement.

Furthermore, school leaders should know that they can improve teachers' attitudes towards feedback as well. Firstly, if school leaders value feedback themselves, teachers are more likely to also value and accept feedback. Therefore, it is beneficial for school leaders to have a positive feedback orientation, an individual characteristic that refers to the tendency to seek feedback because it is generally seen as useful, and to act on feedback to guide behavior change and performance improvement (Smither & London, 2002). Secondly, while preparing for an inspection, school leaders can arrange a meeting to clarify inspectors' expectations for the school and its teachers. If the school leader is already aware of certain weaknesses, he or she can indicate these in advance and put the teachers at ease right away. Thirdly, when inspectors provide feedback to the school through the inspection report, school leaders can help teachers to understand and interpret the feedback. Feedback workshops can enhance teachers' ability and motivation to address the identified shortcomings. Follow-up sessions provide an opportunity to evaluate progress and address problems in the school team. It is also important to check whether teachers have understood the expectations or whether there is a reason why these expectations cannot be properly met.

### *Pay attention to the well-being and emotions of teachers and colleagues after a school inspection*

A final practical implication concerns the affective responses that teachers reported regarding the inspection process. Researchers have observed that the emotional impact of an inspection can be very strong and the inspection could result in burn-out, absenteeism, and even teacher turnover (Ferguson et al., 1999; Reid, 2010; Scanlon, 1999). Although the majority of teachers in our studies reported emotions of joy, we noticed large differences between teachers in general, and between teachers within the same school. We found that a smaller group of teachers has experienced emotions of anger and sadness. Therefore, school leaders should be aware of and acknowledge the fact that there are teachers in their school who may have difficulties with the consequences of the inspection visit. If school leaders want to retain their teachers, they must provide a positive and supportive school culture and climate (Hughes, Matt, & O'Reilly, 2014).

## In closing

In this dissertation, four studies were presented in which we investigated teachers' cognitive and affective responses regarding the school inspection feedback they received. Further, we examined the relationship between these responses and teachers' acceptance of and their willingness to use this feedback. Using various research methods, we discovered that teachers' perceptions of organisational justice and feedback relevance are more related to their feedback acceptance than teachers' perceptions regarding inspector credibility and their affective responses. However, further research is needed to explore whether our findings are generalisable in other educational contexts.

# KEY FINDINGS

| | |
|---|---|
| Teachers' affective responses regarding the inspection feedback are related to their cognitive responses (or thoughts) regarding the inspectors' credibility, the inspection process, the inspection outcome and the characteristics of the inspection feedback. | STUDY 1–4 |
| During an inspection visit, teachers' affective responses within the same school differ based on their individual cognitive responses. | STUDY 1–2 |
| Accepting the inspection feedback does not automatically lead to a greater willingness of teachers to use the feedback. | STUDY 4 |
| Although teachers' perceptions of inspector credibility are not directly associated with their acceptance of the feedback received, they are negatively related to the experience of anger and sadness. | STUDY 3 |
| Positive perceptions regarding the inspections' organisational justice are positively related to teachers' acceptance of inspection feedback. | STUDY 3–4 |
| The importance of constructive and clear feedback is repeatedly emphasised by the teachers in this study, although a significant relationship is lacking in the quantitative data. | STUDY 1–4 |
| Regarding the inspection visit, teachers mainly report emotions of joy, followed by surprise. Emotions of anger and sadness are hardly found. | STUDY 2–3 |
| Since teachers respond neutrally to the question of whether the inspection feedback raised their awareness regarding aspects of their learning and teaching practices, the overall role of teacher awareness is rather small. | STUDY 4 |
| Higher levels of feedback utility (teachers' perceived utility of feedback in general) are a lever for teachers' willingness to use the inspection feedback. | STUDY 4 |

# NEDERLANDSE SAMENVATTING

*Dutch summary*

**ABSTRACT** *Dit proefschrift draagt bij tot het verwerven van een beter inzicht in de manier waarop leraren inspectiefeedback verwerken alvorens zij deze accepteren of bereid zijn ermee aan de slag te gaan. In deze samenvatting situeren we eerst de noodzaak van dit proefschrift om de determinanten van feedbackacceptatie bij leraren te exploreren. Nadien gaan we dieper in op de belangrijkste conclusies uit dit proefschrift. Tot slot geven we een aantal aanbevelingen die de acceptatie van inspectiefeedback en de bereidheid van leraren om met de feedback aan de slag te gaan vergroten.*

Tijdens een schooldoorlichting gaat de onderwijsinspectie na of scholen de onderwijsreglementering respecteren. Daarnaast tracht zij ook het schoolteam te stimuleren om de onderwijskwaliteit van de school verder te ontwikkelen. Een derde doelstelling van de inspectie die door stakeholders binnen onderwijs onderscheiden wordt, is de professionele ontwikkeling van de leraar. Om de ontwikkelingsdoelstellingen te bereiken, geeft de onderwijsinspectie feedback aan leraren en schoolleiders over zowel de sterke als zwakke kanten van de doorgelichte school. Deze feedback kan zowel mondeling - tijdens gesprekken met leraren en de directeur - als schriftelijk - in het doorlichtingsverslag - geformuleerd worden. Terwijl scholen en leraren verondersteld worden deze feedback te accepteren en hun tekortkomingen weg te werken (Coe, 2002), is het huidig inspectieonderzoek voornamelijk gericht op hoe inspecties de ontwikkeling en verbetering van scholen op macro- en mesoniveau bevorderen (bijv. Ehren et al., 2015; Gustafsson et al., 2015; Penninckx, De Maeyer, & Van Petegem, 2016). Onderzoek dat zich richt op de mate waarin feedback van een schoolinspectie de professionele ontwikkeling van leraren stimuleert, is echter beperkt.

Niet-onderwijskundig, psychologisch onderzoek geeft aan dat het ontvangen van feedback niet rechtstreeks tot een gedragswijziging leidt, maar dat het accepteren van feedback en de bereidheid van een individu om met de feedback aan de slag te gaan, beïnvloed wordt door de cognitieve responses (ideeën of percepties) en affectieve responses (de ervaren emoties) van het individu ten aanzien van de feedback (e.g. Brett & Atwater, 2001; Greller & Herold, 1975; Leung et al. 2001). Daarnaast wijzen studies uit dat ook de attitudes ten aanzien van feedback (feedback utility en feedback self-efficacy) en individuele persoonlijkheidskenmerken (self-efficacy en self-esteem) invloed kunnen uitoefenen op de manier waarop het individu de feedback zal verwerken (Bell & Arthur, 2008; Kluger & DeNisi, 1996; London & Smither, 2002).

Systematisch onderzoek naar de relatie tussen deze factoren, de feedbackacceptatie en de bereidheid van leraren om met deze feedback aan de slag te gaan ontbreekt echter binnen de

context van een schoolinspectie. Met dit proefschrift willen we dan ook meer inzicht brengen in de determinanten van feedbackacceptatie en de bereidheid van leraren om de feedback van de inspectie te gebruiken. Twee onderzoeksvragen staan hierbij centraal: 'Welke cognitieve en affectieve responses ervaren leraren met betrekking tot inspectiefeedback?' (OV1) en 'Hoe draagt het samenspel van de cognitieve en affectieve responses van leraren bij tot de acceptatie en de bereidheid van leerkrachten om gebruik te maken van inspectiefeedback?' (OV2).

Om deze onderzoeksvragen te beantwoorden werd een multiple methods research design toegepast waarbij aan de hand van vier empirische studies de antwoorden op de onderzoeksvragen verzameld werden. In de volgende secties vatten we de belangrijkste bevindingen uit deze studies bondig samen.

### *OV1: Welke cognitieve en affectieve responses ervaren leraren met betrekking tot inspectiefeedback?*

Met betrekking tot de eerste onderzoeksvraag, werden de cognitieve en affectieve responses van leerkrachten met betrekking tot inspectiefeedback in de diepte onderzocht door middel van twee kwalitatieve diepgaande studies. In **studie 1** werd de aard van de cognitieve en affectieve responses van leerkrachten in kaart gebracht door middel van een kwalitatieve analyse van diepte-interviews met 21 leraren in recent geïnspecteerde basisscholen. In **studie 2** werd gebruik gemaakt van een mixed-method surveyonderzoek bij 361 leerkrachten. Hierbij werden gesloten vragen gebruikt werden om de aanwezigheid en de intensiteit van affectieve responses van leerkrachten te onderzoeken op drie verschillende momenten tijdens een inspectiebezoek. De antwoorden op de open vragen verrijkten de resultaten van de kwantitatieve bevraging. Tot slot gingen we aan de hand van een grootschalig surveyonderzoek bij 687 leerkrachten in **studie 3** na of de bevindingen uit de eerste twee studies generaliseerbaar zijn binnen de Vlaamse onderwijscontext.

Wat de **cognitieve responses** van leraren ten aanzien van inspectiefeedback betreft, maken we een onderscheid tussen drie cognitieve responses: inspector credibility, organisational justice en kernmerken van de inspectiefeedback. Allereerst is er 'inspector credibility' (oftewel de geloofwaardigheid van de inspecteur) dat binnen dit proefschrift opgesplitst wordt in twee factoren: betrouwbaarheid en expertise. Daarnaast onderscheiden we 'organisational justice'; hiermee verwijzen we naar de mate van eerlijkheid of gerechtigheid die leraren toekennen aan de procedures (procedural justice) en uitkomsten van de inspectie (distributive justice). Tot slot

zijn de constructiviteit, helderheid en relevantie van de feedback drie kenmerken van inspectiefeedback die in dit proefschrift onderscheiden worden.

Terwijl de bevindingen van de eerste twee studies aantonen dat vooral de houding van een inspecteur, en de manier waarop hij of zij de feedback communiceert een belangrijke rol spelen in de manier waarop leraren een doorlichting beleven, geven de resultaten van de kwantitatieve bevraging in studie 3 aan dat leraren over het algemeen zeer positief zijn ten aanzien van de betrouwbaarheid, expertise, procedural justice en distributive justice. Uit de interviews en de open vragen werd duidelijk dat inspecteurs geloofwaardig werden geacht wanneer zij een open en respectvolle dialoog bevorderen. Inspecteurs met een vooringenomen, arrogante en respectloze houding ten aanzien van de school werden als ongeloofwaardig beschouwd. De resultaten van de interviews onderstrepen eveneens het belang van een inspecteur om begrip te tonen voor het verschil tussen de door de overheid beoogde school- en klasorganisatie en de realiteit binnen de scholen. Het expliciteren van de verwachtingen en de procedures aan het begin van het inspectiebezoek zorgt voor versterkte percepties van procedural justice.

De resultaten van studie 3 wijzen erop dat leraren de constructiviteit en de helderheid van de inspectiefeedback minder hoog inschatten ten aanzien van andere feedbackkenmerken. Deze resultaten vonden we ook terug in studie 1 en studie 2 waar leraren aangaven dat de inspectiefeedback te vaag en te algemeen geformuleerd wordt om gebruikt te worden. Daarnaast zijn leraren vragende partij voor meer constructieve feedback onder de vorm van praktische tips.

Wat de **affectieve responses** van leraren betreft, wijzen de resultaten van studie 1 uit dat leraren zowel emoties van vreugde (tevredenheid, opluchting en trots), als van boosheid (woede en frustratie) en verdriet ervaren tijdens een schooldoorlichting. De kwantitatieve resultaten in studie 2 geven echter een totaal ander beeld. Volgens de leraren in deze studie worden de emoties van vreugde, gevolgd door emoties van verrassing, het meest ervaren tijdens een schooldoorlichting. In lijn met Penninckx (2015) leiden vooral het gebrek aan ervaring en de onzekerheid over wat er gaat komen bij leraren tot emoties van angst. Emoties van boosheid en verdriet werden amper gerapporteerd. Deze bevindingen geven meer inzicht in de discussie over de dominante aanwezigheid van negatieve emoties in het inspectieonderzoek (Penninckx & Vanhoof, 2015). De uitbreiding van onze steekproef in studie 3 van 361 naar 687 docenten gaf vergelijkbare resultaten, namelijk een hoge gemiddelde score voor vreugde en lage gemiddelde scores voor boosheid en verdriet.

***OV2: Hoe draagt het samenspel van de cognitieve en affectieve responses van leraren bij tot de acceptatie en de bereidheid van leerkrachten om gebruik te maken van inspectiefeedback?***

Met betrekking tot de tweede onderzoeksvraag richtte studie 3 (N=687) zich enerzijds op het genereren van kennis inzake de relatie tussen de cognitieve en affectieve responses van leraren, en anderzijds tussen deze responses en de acceptatie van inspectiefeedback. Er werd een padmodel getest om de onderlinge samenhang tussen cognitieve en affectieve responses te onderzoeken, en om na te gaan of affectieve responses de relatie tussen feedbackacceptatie en cognitieve responses mediëren. In **studie 4** bouwden we verder op de resultaten van studie 3 en werd de relatie tussen feedbackacceptatie en de bereidheid van leraren om de ontvangen inspectiefeedback te gebruiken onderzocht. Daarnaast namen we individuele lerarenkenmerken (feedback utility, feedback self-efficacy, teacher self-efficacy en self-esteem) en de toename in het bewustzijn van leraren door de inspectiefeedback mee op in een padmodel als mogelijke verklarende factoren van de bereidheid van leraren om de ontvangen inspectiefeedback te gebruiken.

Wat betreft de relatie tussen cognitieve en affectieve responses van leraren ten aanzien van de inspectiefeedback, wijzen de resultaten uit dat hoofdzakelijk de geloofwaardigheid van de inspecteur en de percepties van distributive justice negatief gerelateerd zijn aan het ervaren van boosheid en verdriet bij het vernemen van het inspectieresultaat. Daarnaast werden ook positieve relaties gevonden tussen distributive justice en emoties van vreugde, en tussen de helderheid van de feedback en vreugde.

Op basis van onze resultaten in studie 3 kon niet worden vastgesteld dat affectieve responses optreden als mediërende mechanismen in de relatie tussen cognitieve responses en feedbackacceptatie, op een positief, maar bijna verwaarloosbaar verband tussen boosheid en feedbackacceptatie na. De resultaten toonden wel een positief direct verband aan tussen beide componenten van organisational justice (procedural justice en distrbutive justice) en feedbackacceptatie. Daarnaast lijkt vooral de relatie tussen de relevantie van de inspectiefeedback en feedbackacceptatie belangrijk te zijn, aangezien tussen beide variabelen zowel één directe als twee indirecte relaties (via feedbackacceptatie en via een toename in het bewustzijn van leraren) gevonden werden.

Tot slot wijzen onze bevindingen uit dat feedback utility zowel rechtstreeks als onrechtstreeks (via de cognitieve responses en via een toename in het bewustzijn van leraren) gerelateerd is aan

feedbackacceptatie en de bereidheid van leraren om de inspectiefeedback te gebruiken. Met andere woorden, hoe meer docenten positief staan tegenover het nut van feedback in het algemeen, hoe meer ze aangeven om de inspectiefeedback te accepteren en hoe meer ze bereid lijken te zijn om de ontvangen inspectiefeedback te gebruiken. De gevonden relaties zijn echter klein.

***Theoretische bijdragen en implicaties voor vervolgonderzoek***

Dit proefschrift verschaft ons inzicht in de mate waarin leraren feedback van de schoolinspectie accepteren en bereid zijn om deze feedback te gebruiken en hoe de resultaten tussen leraren binnen eenzelfde school kunnen verschillen op basis van hun cognitieve en affectieve responses. Bovendien geeft het een duidelijk beeld van de aard van de cognitieve en affectieve responses. Terwijl in de bestaande onderzoeksliteratuur hoofdzakelijk verwezen wordt naar de negatieve emotionele effecten van een doorlichting op de leraren, blijkt uit dit onderzoek dat Vlaamse leraren voornamelijk emoties van vreugde rapporteren. Daarnaast blijkt uit onze resultaten dat er nauwe samenhang is tussen de cognitieve en affectieve responses van leraren ten aanzien van inspectiefeedback. De bevindingen die hier werden beschreven kunnen leiden enerzijds tot een beter begrip van het ontstaan van emotionele reacties op inspectiefeedback, maar geven anderzijds inzicht in de determinanten en gevolgen van feedbackacceptatie. Het is belangrijk dat toekomstig onderzoek dat zich focust op de emotionele beleving van een doorlichting bij leraren niet enkel een breed scala aan emoties in acht neemt, maar ook de relatie tussen emoties en cognitieve responses van leraren verder exploreert. Daarnaast tonen de resultaten aan dat er nood is aan alternatieve hypotheses inzake de determinanten van feedbackacceptatie bij leraren.

Voor toekomstig onderzoek wordt aangeraden om gebruik te maken van een longitudinaal design om inzicht te krijgen in de langetermijneffecten van de inspectiefeedback bij leraren. Daarnaast is het interessant om in vervolgonderzoek de gevolgen van een negatief inspectieadvies te onderzoeken in zowel het basisonderwijs als secundair onderwijs. Aangezien het huidige onderzoek vooral gebaseerd is op zelfrapportage-onderzoek, kan verder onderzoek bronnentriangulatie toepassen waarbij de percepties van andere betrokkenen, zoals ouders, leerlingen, pedagogische begeleiders en inspecteur, in kaart kunnen worden gebracht.

### *Aanbevelingen*

*Versterk de perceptie van organisational justice door leraren.*

Onze bevindingen ondersteunen het idee dat de acceptatie van de inspectiefeedback van leraren onlosmakelijk verbonden is met de omstandigheden waaronder een schoolinspectie plaatsvindt. Vanuit het perspectief van een schoolinspecteur is het interessant om te begrijpen dat de percepties van leraren inzake het gedrag en de besluitvormingsprocessen sterk gerelateerd zijn aan de feedbackacceptatie van leraren en hun bereidheid om de feedback van de inspectie te gebruiken. Het belang van organisatorische rechtvaardigheid wordt meerdere malen benadrukt in de bevindingen van dit proefschrift. Aangezien het besluitvormingsproces van de inspecteurs door de docenten als een zwarte doos kan worden ervaren, is het belangrijk dat de inspecteurs ervoor zorgen dat de docenten op de hoogte zijn van de procedures en de evaluatiecriteria. Transparantie over hoe de bevindingen worden gewogen en geïnterpreteerd in het oordeel van de inspecteurs is hiervan een voorbeeld (McLaughin, 1991).

*Feedbackrelevantie is cruciaal voor de verwerking van feedback.*

Een tweede aanbeveling betreft het belang van feedbackrelevantie in het feedbackproces. In studies 3 en 4 vonden we dat de acceptatie van de inspectiefeedback door docenten en hun bereidheid om deze te gebruiken over het algemeen nauw samenhangt met de mate waarin de inspectiefeedback als relevant wordt beschouwd. Zoals Chapman (2001, p. 44) aangeeft, is de enige situatie waarin het lesgeven en leren in een school niet kan worden verbeterd tijdens een inspectie, wanneer elke geobserveerde les een uitmuntende beoordeling zou krijgen. In werkelijkheid is dit echter erg onwaarschijnlijk, en kan feedback op schoolniveau inzake de onderwijsleerprocessen een stimulans zijn om de prestaties op lerarenniveau te verbeteren. Als dergelijke opmerkingen niet in het inspectierapport worden opgenomen, is het voor de schooldirectie moeilijker om vernieuwingen of veranderingen te introduceren en te legitimeren.

*Installeer een feedbackrijke cultuur in scholen, zo krijgen leraren voldoende kansen om te groeien in het geven én ontvangen van feedback.*

Uit de resultaten van dit proefschrift blijkt dat de houding van leraren ten opzichte van feedback in het algemeen een belangrijke determinant is voor de manier waarop zij met de feedback van de inspectie omgaan (acceptatie en bereidheid om de feedback te gebruiken). Aangezien de houding van het individu ten opzichte van feedback deels afhankelijk is van de steun en het leerklimaat, lijkt een sterke feedbackcultuur cruciaal voor de ontwikkeling van de scholen en de

leerkrachten (Smither & London, 2002). We geloven daarom dat het nodig is om een cultuur van klassikale observatie en meer informele evaluatiemomenten in scholen te installeren. Volgens Behnke (2015) zou het opzetten van team- en co-onderwijs en het bijwonen van lessen door collega's de systematische reflectie op de praktijk van de leerkrachten in de klas moeten verbeteren. Dit kan niet alleen leiden tot een verbetering van het klassikale onderwijs en het onderwijs, en dus tot een hogere prestatie van de leerlingen, maar ook tot een gewenning aan evaluaties en klassikale observaties (Behnke, 2016). Daarnaast suggereert de literatuur dat een positieve houding ten opzichte van feedback essentieel is voor de professionele ontwikkeling en leren (London & Smither, 2002). Leerkrachten zouden zich meer bewust moeten zijn van hun houding ten opzichte van feedback en aangemoedigd moeten worden om feedback te omarmen als een leermogelijkheid. Een sterke oriëntatie op leerdoelen kan helpen om de veerkracht voor negatieve feedback te bevorderen en de feedback te zien als een nuttig instrument voor verdere verbetering.

*Besteed aandacht aan het welzijn en de emoties van leerkrachten en collega's na een schoolinspectie*

Onderzoekers hebben opgemerkt dat de emotionele impact van een inspectie zeer sterk kan zijn en dat de inspectie kan leiden tot burn-out, absenteïsme en zelfs lerarenverloop (Ferguson et al., 1999; Reid, 2010; Scanlon, 1999). Hoewel de meerderheid van de leerkrachten in onze studies emoties van vreugde rapporteerden, merkten we grote verschillen op tussen leerkrachten in het algemeen, en tussen leerkrachten binnen dezelfde school. We vonden dat een kleinere groep leerkrachten emoties van woede en verdriet heeft ervaren. Daarom moeten schoolleiders zich bewust zijn van het feit dat er op hun school leerkrachten zijn die moeite hebben met de gevolgen van het inspectiebezoek en deze erkennen. Als schoolleiders hun leraren willen behouden, moeten ze zorgen voor een positieve en ondersteunende schoolcultuur en -klimaat (Hughes, Matt, & O'Reilly, 2014).

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**All studies**

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