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## The impact of school culture on schools' pupil well-being policy-making capacities

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Pupil well-being has been an important topic in educational research for some time. Differences between schools in their influence on the well-being of their pupils are attributed to the policy-making capacities of the school. Little is known about schools' policy-making capacities with regard to pupil well-being, and the impact of school culture on these policy-making capacities. This study addresses these questions using a quantitative research approach. The results show that teachers rate the policy-making capacities of their school, with regard to pupil well-being, in largely positive terms and that these policy-making capacities are mainly affected by flexible perspectives of effectiveness within the culture of schools.

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#### Introduction

Given the concern for pupils' social and emotional development, pupil well-being has been an important topic in educational research for some time. After all, the well-being of pupils plays an important role in their development (Cefai and Camilleri 2015; Park 2004). With a view to discovering contextual factors, such as the degree of external control, for example, that have an important influence on pupil well-being (Ryan and Deci 2000), research into the effectiveness of schools has no longer been focused exclusively on cognitive outcomes, but has also looked at the apparent well-being of their pupils (Gutman and Feinstein 2008). Differences between schools in relation to their influence on pupil well-being have been found in numerous studies (Heers et al. 2015; Konu, Lintonen, and Autio 2002; Vostanis et al. 2013). Schools have been shown to be different in terms of effectiveness; schools that have a strong influence on cognitive learning are not necessarily also effective when it comes to pupil well-being (Heers et al. 2015; Opdenakker and Van Damme 2000).

Various researchers attribute the differences between schools in their influence on the well-being of their pupils to the policy-making capacities of the school (Opdenakker and Van Damme 2000; Robinson, Lloyd, and Rowe 2008; Vescio, Ross, and Adams 2008). Strong well-being policy-making capacities are characterised by setting shared objectives for pupil well-being, the use of effective communication strategies, and working together. Additional characteristics include: developing personal and professional support, developing an

innovative capacity with regard to well-being, and the presence of shared leadership with regard to well-being. Finally, strong pupil well-being policy-making capacities become clear by setting up and implementing an integrated policy on well-being, and developing a responsive and reflective capacity with regard to well-being (Creemers and Kyriakides 2008; Engels et al. 2004: Robinson and Timperley 2007).

Although the academic value of current thinking on policy-making capacities is apparent from the literature on school effectiveness (Cefai and Camilleri 2015; Laila 2015; Maas and Lake 2015), this concept has still not been sufficiently explored with regard to pupil wellbeing. There is very little empirical evidence on schools' pupil well-being policy-making capacities; this means that not much is known about how effectively schools formulate their well-being policy, or about the extent to which they are capable of promoting pupil wellbeing. The current theoretical knowledge base on pupil well-being is in need of research on schools' pupil well-being policy-making capacities in order to understand differences between schools with regard to pupils' well-being (Engels et al. 2004; Matthews et al. 2015). Moreover, conceptual underpinning is essential on how the policy-making capacities of schools can be improved, and why certain schools develop stronger or weaker pupil wellbeing policy-making capacities. The fact that schools constitute an integrated whole of interrelated cultural and structural mechanisms, strengthens our assumption that differences in schools' pupil well-being policy-making capacities arise out of the characteristics of the school's culture. From an organisational perspective, school culture relates to the underlying values of the organisation, which, in turn, give rise to an internal or external focus and a control-orientated, or flexible orientation (Quinn and Cameron 1999).

In the absence of empirical evidence on schools' pupil well-being policy-making capacities, and in order to arrive at a deeper understanding of this topic, this study has a twofold research focus. Firstly, on the basis of eight indicators of policy-making capacities, we will examine how teachers perceive the policy-making capacities of Flemish primary schools. Secondly, we will look at the extent to which school culture contributes to the pupil wellbeing policy-making capacities of the school. Specifically, we will pose the following research questions: (1) How do teachers perceive their school's pupil well-being policy-making capacities? (2) What is the impact of school culture on pupil well-being policy-making capacities?

#### Theoretical framework

Given the above problem statement, within this conceptual framework, we will start by providing a clear description of the concepts of policy-making capacities and school culture.

### Pupil well-being policy-making capacities

Pupil well-being policy-making capacities are expressed via a number of indicators. For example, in a school with strong pupil well-being policy-making capacities, the school team has, in the first instance, thought carefully about how pupil well-being can be promoted. In doing so, the school arrives at a shared vision, in which different ideas are reconciled, clear priorities are set, and a plan of approach is drawn up. Our first indicator of a school with strong pupil well-being policy-making capacities is therefore the presence of shared

objectives (Creemers and Kyriakides 2008; Laila 2015; Maas and Lake 2015; Robinson, Lloyd, and Rowe 2008; Vescio, Ross, and Adams 2008).

With a view to involving the members of the school team sufficiently in the policy adopted, and ensuring the enforceability of decisions, it is important to create shared leadership (Harris 2003; Kessler 1992; Tjepkema 1993). In this situation, leadership is shared between all the team members (Rice and Schneider 1994; Smith and Piele 1997). Important decisions on the approach to pupil well-being are therefore taken in consultation, and as many participants as possible should be involved in decision-making process.

Another important factor in the enforceability of decisions is the presence of personal and professional support within the school (Cefai and Camilleri 2015; Laila 2015; Maas and Lake 2015; Vescio, Ross, and Adams 2008). Personal and professional support creates good relationships and trust. In this way, support for the pupil well-being decision-making process can be developed and maintained (Jeris 2003; Levine and Lezotte 1990; Senge 1997). Furthermore, it is important to develop effective communication strategies within the school (Levine and Lezotte 1990; Vescio, Ross, and Adams 2008). This implies unobstructed and open (in)formal communication concerning the school's approach to pupil well-being.

Among the advantages of using effective communication strategies within the school is the fact that team members gain a better insight into other people's responsibilities and clear arrangements are made concerning the responsibilities of committees or work groups. School policy therefore concerns more than just one or two policy areas. Schools with strong pupil well-being policy-making capacities have an integrated policy with sufficient coherence between various policy areas (Verhoeven 1986).

A key factor for schools is the need to respond appropriately to questions and expectations from their social environment (Engels et al. 2004; Laila 2015; Wilkins 2002). In formulating, policy schools need to take account of various stakeholders (parents, pupils, etc.) in their approach to well-being by asking their opinion and finding out their views. In other words, schools must have a responsive capacity in order to achieve strong pupil well-being policy-making (Cotton 2003; Robinson, Lloyd, and Rowe 2008; Segrott, Rothwell, and Thomas 2013).

Equally, innovative capacity is another indicator of schools' pupil well-being policy-making capacities. This reflects both the extent to which a school is able to successfully implement innovations (Geijsel 2001; Potter, Reynolds, and Chapman 2002), and the extent to which the school in question is capable of coping with changes, both those imposed by government and those originating from within the school itself (Geijsel, van den Berg, and Sleegers 1998; Thorburn 2015). A school with a strong innovative capacity is primarily characterised by a positive attitude towards innovations and by not being afraid to question common assumptions.

Finally, team members in schools with strong policy-making capacities are willing to reflect on their own approach and activities (Segrott, Rothwell, and Thomas 2013; Thorburn 2015; Vescio, Ross, and Adams 2008). They adopt a critical attitude towards the existing approach, and are continually on the lookout for possible opportunities for improvement. In order to arrive at strong pupil well-being policy-making capacities, a certain degree of reflective capacity is, therefore important.

### **Competing values framework**

In order to examine school culture, we will use the competing values framework (Quinn and Cameron 1999). The competing values framework is a way of describing the culture of organisations using the values they promote in order to achieve organisational effectiveness.

The framework is based on two important dimensions: an internal vs. an external focus, and flexibility vs. control (Quinn and Cameron 1999). The first dimension concentrates on the organisational focus of the organisation (in this case, a school), and ranges from an internal focus on the people in the organisation to an external focus on the organisation itself. The second dimension represents the contrast between control and flexibility. On the basis of these two dimensions four perspectives of effectiveness can be identified:

The "human relations model" is characterised by an internal organisational focus and flexibility. This model strives towards the development of the organisation's human resources. To this end, there is a desire to promote openness, collaboration, loyalty, involvement and motivation on the part of the team members. Strategies used to achieve this include: team building, participation, consensus building and attention to the team's morale. In this model, the school's management assumes the roles of stimulator, team-builder, mentor and coach (Ouinn et al. 2003).

The "open systems model" has an external and flexible focus. The objective of the organisation is to achieve optimal coordination with the surrounding environment. An important means to this end is flexibility: being willing and able to react to changes in the environment. Consequently, in this model, the school management plays the roles of negotiator and intermediary between the school and its social environment (Quinn et al. 2003).

The "internal process model" has an internal and control-orientated focus. Organisations in this model strive for smoothly functioning systems in order to achieve control and stability within the organisation. Strategies used include: the clear delineation of responsibilities, careful planning and formalisation, and the standardisation of consultation and decision-making processes. In this model, there is also a focus upon the clear communication of information and objectives. The school management thus plays an important role with regard to coordination and control (Quinn et al. 2003).

The "rational goal model" is characterised by an external organisational focus and control-orientation. The objective of organisations in this model is to achieve the best possible result, with minimal resources. They are focused on productivity and efficiency. In order to promote performance and results-oriented behaviour among team members, strategies are drawn up which include specifying and quantifying objectives and results. Here, the school management plays the role, as it were, of manufacturer (Quinn et al. 2003).

The two dimensions of the model seem to give out messages that appear contradictory. However, while this model is indeed based on apparent opposites (hence the name "competing values"), these competing values are not necessarily mutually exclusive. After all, schools are expected to be controlled and stable organisations, but they are expected to be adaptable and flexible, to a certain extent, as well. For that reason, in order to be able to say that an organisation is effective, all four of the perspectives of effectiveness identified must be present to some degree (Quinn and Rohrbaugh 1983; Quinn et al. 2003). It is up to schools to find the right balance in their organisation, between the four perspectives of effectiveness. However, given the various external influences on school culture (Leithwood and Jantzi 2000; Stoll 1998), this balance cannot be clearly defined (Maslowski 2001).

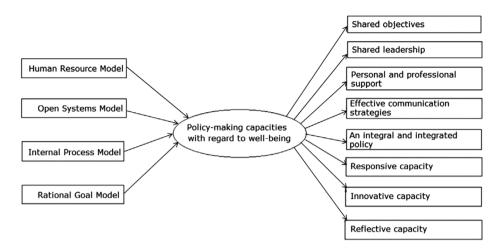


Figure 1. Conceptual model.

In this study, school culture is used as an explanatory variable for schools' pupil well-being policy-making capacities. Figure 1 shows the interrelationship between the two concepts under scrutiny. Based on this theory, we approach pupil well-being policy-making capacities as a latent variable, which explains the variance in eight indicators (Harris 2003; Laila 2015; Maas and Lake 2015; Segrott, Rothwell, and Thomas 2013; Thorburn 2015). Furthermore, given the interrelatedness between school culture and policy-making (Carpenter 2015; Chan and Ross 2014), our hypothesis is that different underlying cultural values exert a different influence on schools' pupil well-being policy-making capacities.

### Methodology

We opted for quantitative online survey research. The first major reason for choosing to use survey research is that quantitative research – unlike qualitative research – allows the possibility of selecting a group of schools and respondents, within a certain context, that is representative of the population. A second reason for choosing quantitative research is that this allows us to empirically test the relationships described in the conceptual framework by carrying out statistical analyses. A larger group of schools and respondents will mean that there is sufficient power present to carry out such analyses, and therefore to determine and explain differences between schools and respondents.

#### Respondents

In this study, teachers were surveyed about their perceptions of pupil well-being policy-making capacities and school culture, in their school. The target of this research consisted of primary schools in one Flemish province. A stratified sample of 65 primary schools of this target population was taken. The sample was stratified according to educational network, due to the importance of this criterion in view of the specific nature of the Flemish educational context. The percentage of SES pupils within schools was also included in the stratification, as differences have been found between schools with respect to well-being on the basis of this criterion in previous research (van Aerden and Cantillon 2010). We can therefore

assume that pupil well-being policy-making capacities may differ between schools according to the percentage of SES pupils. Within each school, as many teachers as possible were involved in the survey. In total, 797 teachers were surveyed in 65 schools. Within this sample, 30% of the teachers has up to 5 years of teaching experience, 33% between 5 and 15 years and 37% more than 15 years.

For 176 participants missing data were found in the scales to carry out analyses for the current study. Therefore, these participants were excluded from the data analyses. Consequently, the total number of participants to carry out the data analyses was 621.

#### Instrumentarium

The instrumentarium used in the survey was based on existing instruments. We used operationalisations of school culture and schools' policy-making capacities that had already been used in previous studies (Maslowski 2001; Vanhoof, Van Petegem, Buvens, and Verhoeven 2009). In these studies, the validity of these operationalisations proved to be sufficient.

Tables 1 and 2 provide information concerning the psychometric characteristics of the scales used in this study. We tested the internal consistency of all the scales by means of a Cronbach alpha measure. The Cronbach alpha values of 0.75 and higher denote that both the scales for the eight indicators of schools' policy-making capacities, and the scales for the four perspectives of effectiveness, exhibit a strong internal consistency.

#### **Analyses**

In order to investigate the first research question, descriptive parameters were taken into account. To examine teachers' perceptions of their school's pupil well-being policy-making capacities, we analysed the averages of the scales used to measure this concept: shared objectives, shared leadership, personal and professional support, effective communication strategies, integrated policy, responsive capacity, reflective capacity and innovative capacity.

The second research question, i.e. the impact of school culture on pupil well-being policy-making capacities, was addressed using two complementary analyses. The first analysis explored school level differences. We identified various "clusters" of schools with similar cultural perspectives on effectiveness. We therefore calculated the aggregated school scores for the various perspectives on effectiveness. This means that an average school score was calculated by calculating the average of the scores of all teachers within a school. On the basis of these average school scores, a hierarchical cluster analysis was carried out with 65 schools, using the Ward method. In order to validate this cluster analysis, we analysed the variance between clusters for all four perspectives of effectiveness. Afterwards, we studied differences between these clusters' policy-making capacities with regard to pupil well-being. Differences between the three groups of schools were examined by means of analysis of variance (ANOVA), alongside post hoc analysis (Tukey).

The second analysis tested differences at an individual level. By means of Structural Equation Modelling (SEM), we translated the conceptual model (Figure 1) into a path model, and tested it's fit to the empirical data. The path analysis was conducted at an individual level, because the relatively small number of teachers surveyed per school (on average: 12), and the variation in the number of respondents per school, resulted in multilevel path

Table 1. Descriptive parameters and psychometric characteristics: the scales for "pupil well-being policy-making capacities".

Policy-making capacities with regard to well-being	Items	n	AV	SD	Cronbach's alpha
Shared objectives					
In this school a clear goal is set in the approach to well-being	6	621	3.22	0.61	0.90
Shared leadership					
In this school important decisions are taken together	6	621	3.14	0.61	0.87
Personal and professional support					
In this school we trust each other's approach to well-being	6	621	3.09	0.66	0.91
Effective communication strategies					
In this school motives, ideas, aspirations and uncertainties with regard to the approach to well-being are openly communicated	6	621	3.03	0.66	0.88
Integrated policy					
In this school there are clear arrangements with regard to authorizations of existing councils/work groups	6	621	3.00	0.56	0.84
Responsive capacity					
In this school the opinion of parents with regard to the approach to well-begin is actively called	7	621	2.93	0.60	0.89
Innovative capacity					
In this school a positive attitude towards innovations with regard to the approach to well-begin is held	6	621	3.02	0.55	0.85
Reflective capacity					
In this school attention is paid to reflecting well on our actions with regard to well-being before acting	6	621	2.93	0.54	0.83

Note: 4-point Likert scale, ranging from "1 – entirely disagree" to "4 – entirely agree".

analyses on this data-set being less accurate (Hox and Maas 2001). The initial conceptual model was modified to improve the model fit. The hypothesised relation between the "rational goal model" and "school's policy-making capacities" appeared to be statistically insignificant and, therefore, was removed from the model. Furthermore, 10 correlations between indicators of policy-making capacities were added to the model (correlations between "shared objectives" and "shared leadership", "effective communication strategies" and "integrated policy"; between "shared leadership" and "personal and professional support", "effective communication strategies", "integrated policy" and "reflective capacity"; between "personal and professional support" and "effective communication strategies"; between "effective communication strategies" and "integrated policy"; and between "integrated policy" and "responsive capacity").

In order to test the fit of the final path model with the data generated, we selected a number of fit indices according to the sample size. For example, we did not take account of the  $\chi^2$  p-value, given that this is influenced by the size of the sample (N > 500) (Barret 2007). With a value above 0.95, the CFI and TLI suggest that the model exhibits a good fit with the data (Schumacker and Lomax 2004). For the RMSEA and SRMR, it is generally assumed that a good model has a value of less than 0.05 and that this value should not exceed 0.1 (Chen et al. 2008). The analysis suggests that the RMSEA (with a 90% reliability) has a value of between 0.04 and 0.07, and has a p-close of 0.36. Using these fit indices, we can conclude that the conceptual model exhibits a good fit with the gathered data.

Table 2. Descriptive parameters and psychometric characteristics: the scales for "school culture".

School culture	Items	n	AV	SD	Cronbach's alpha
Human resource model					
To what extent do others in your school find mutual trust important?	5	621	4.40	0.76	0.93
Open systems model					
To what extent do others in your school find flexibility important?	5	621	3.97	0.73	0.91
Internal process model					
To what extent do others in your school find stability important?	5	621	4.06	0.65	0.80
Rational goal model					
To what extent do others in your school find performance orientation important?	5	621	3.90	0.56	0.75

Note: 5-point Likert scale, ranging from "1 – not important" to "5 – very important".

#### Results

### Schools' pupil well-being policy-making capacities

We will answer the first research question using the descriptive parameters that were set out in Table 1.

In general, teachers rate the pupil well-being policy-making capacities of their school in largely positive terms. The averages for the eight indicators of policy-making capacities are all above the neutral midpoint of the evaluation scale (2.50). Therefore, we did not identify any indicators that teachers rated negatively. According to teachers, the most strongly represented indicators of pupil well-being policy-making capacities are shared objectives (average = 3.22; SD = 0.61), and shared leadership (average = 3.14; SD = 0.61). On the other hand, the school's reflective capacity (average = 2.93; SD = 0.54) and responsive capacity (average = 2.93; SD = 0.60) are both rated less positively by teachers. Pupil well-being policy in schools is, therefore, primarily characterised, according to teachers, by the development of a shared vision on pupil well-being within the school team, which everyone strives towards in a collaborative effort, and by sharing the responsibility for this policy among the team members. The policy is, according to Flemish teachers, determined to a lesser extent by responding to expectations from the school's social context, or by reflection on its own activities with regard to pupil well-being.

#### The impact of school culture on pupil well-being policy-making capacities

The second research question is addressed using two complementary analyses: cluster analysis and path analysis. We will first discuss the cluster analysis and follow with the results of the path analysis.

As described in the method section, we conducted a hierarchical cluster analysis to group schools according to their average scores for the various perspectives on effectiveness. This average score was calculated by aggregating the scores of individual teachers within the school.

Table 3 sets out the cluster solution and the descriptive parameters for each cluster. A first step concerned the internal validation of this cluster solution. This means that differences

between all clusters on the different perspectives of effectiveness were investigated through a one-way ANOVA. This analysis reveals statistically significant differences between all three clusters for the internal process model. With regard to the flexibility axis, cluster 1 and cluster 2 do not statistically significantly differ. With regard to the rational goal model, we do not find statistically significant differences between schools in cluster 1 and schools in cluster 3.

From the clustering, we observe that there is one cluster in which the averages for all the perspectives on effectiveness are higher than the general average (Cluster 1 – "strong on all the perspectives"). In these schools (n = 31), therefore, underlying values emerge that are as high on the flexibility axis, as they are on the control axis. In other words, the school culture is a combination of the various perspectives on effectiveness. We also note that the majority of the schools fall into this category (47.6%).

In the second cluster, we identified (Cluster 2 – "strong on internal flexibility, weak on internal control"), that the averages for the "human resource model" and the "open systems model" are higher than the general average. In these schools (n = 17), therefore, underlying values emerge as situated higher on the flexibility axis, and slightly lower on the control axis. This cluster contains 26.2% of the total number of schools.

In the third cluster (Cluster 3 – "weak on all the perspectives"), the averages for the four perspectives on effectiveness are, in each case, lower than the general averages. In these schools (n = 17), underlying values are lower on both the flexibility axis and on the control axis. The proportion of schools in this cluster is 26.2% of the total number of schools.

In a second step, we looked for differences between these school clusters for pupil well-being policy-making capacities. In order to do so, we conducted variance analyses and post hoc analyses of the identified clusters for the various indicators of policy-making capacities. The results of the ANOVA analyses are given in Table 4.

We find a strong and statistically significant effect of the differences in school culture in the school clusters on 7 indicators of pupil well-being policy-making capacities: shared objectives, effective communication, shared leadership, integrated policy, innovative capacity, personal and professional support and reflective capacity. Only in the case of responsive capacity were no statistically significant differences revealed in accordance with differences regarding school culture.

The differences that we observe in the sample between schools from Cluster 1 and Cluster 2 were revealed not to be statistically significant on the basis of post hoc analysis (Tukey). Schools that are rated as "strong on flexibility, weak on control" do not score for the various indicators of school policy-making capacity in a way that is statistically significantly different from schools that are rated as "strong on all the perspectives". If we look at the averages of these clusters for the various perspectives on effectiveness (Table 4), the difference between these clusters is primarily to be found in the "rational goal model".

Schools from Cluster 3 (in which the school culture is rated as "weak on all the perspectives") score the lowest for all the indicators of policy-making capacity, in which we found statistically significant differences. Compared to schools from Cluster 3 ("weak on all the perspectives"), in schools from Cluster 1 and Cluster 2 teachers perceive stronger shared objectives regarding pupil well-being (average = 3.24 and average = 3.37, compared to average = 2.97, respectively). These schools show more open communication about pupil well-being (average = 3.13 and average = 3.11, compared to average = 2.74, respectively), and a greater degree of shared leadership regarding pupil well-being (average = 3.23 and

Table 3. Results of the hierarchical clustering.

	Cluster 1: Strong	Cluster 2: Strong	Cluster 3: Weak				
	on all the perspectives	on flexibility, weak on control	on all the perspectives	Total	F	df	$\eta^2$
n (Schools)	31	17	17	65			
%	47.6	26.2	26.2	100			
Human resource model	4.62 <sup>a</sup>	4.56ª	3.95 <sup>b</sup>	4.41	50.06	64	0.62
Open systems model	4.10 <sup>a</sup>	4.21 <sup>a</sup>	3.57 <sup>b</sup>	3.97	39.15	64	0.56
Internal process model	4.22 <sup>a</sup>	4.01 <sup>b</sup>	3.79 <sup>c</sup>	4.06	26.52	64	0.46
Rational goal model	4.05 <sup>a</sup>	3.72 <sup>b</sup>	3.77ª	3.89	28.33	64	0.48

Note. Averages for the different types of school culture on five-point Likert scale. Differences between  $^{\rm a,b}$  and  $^{\rm c}$  p < .01.

Table 4. Results of the variance analyses on the basis of clusters.

	Cluster 1: Strong on all the perspectives	Cluster 2: Strong on internal flexibility, weak on control	Cluster 3: Weak on all the perspectives	F	df	$\eta^2$
Shared objectives	3.24ª	3.37ª	2.97 <sup>b</sup>	7.49	64	0.20
Shared leadership	3.23 <sup>a</sup>	3.27 <sup>a</sup>	2.89 <sup>b</sup>	9.11	64	0.23
Personal and professional support	3.21 <sup>a</sup>	3.24 <sup>a</sup>	2.74 <sup>b</sup>	14.64	64	0.32
Effective communica- tion strategies	3.13 <sup>a</sup>	3.11ª	2.74 <sup>b</sup>	9.67	64	0.24
Integrated policy	3.05 <sup>a</sup>	3.14 <sup>a</sup>	2.75 <sup>b</sup>	10.27	64	0.25
Responsive capacity	2.97	2.98	2.74	2.93	64	-
Innovative capacity	3.09 <sup>a</sup>	3.14 <sup>a</sup>	2.81 <sup>b</sup>	11.54	64	0.27
Reflective capacity	3.02 <sup>a</sup>	3.04ª	2.68 <sup>b</sup>	13.99	64	0.31

Note. Averages for the indicators of policy-making capacities on a four-point Likert scale. Differences between  $^{\rm a}$  and  $^{\rm b}$ : p < .01.

average = 3.27, compared to average = 2.89, respectively). Furthermore, in schools from Cluster 1 and Cluster 2, different policy areas are integrated into pupil well-being policy (average = 3.05 and average = 3.14, compared to average = 2.75, respectively). There is also a greater innovative capacity in relation to promoting pupil well-being (average = 3.09 and average = 3.14, compared to average = 2.81, respectively). In schools from the aforementioned clusters, there is more teamwork with regard to pupil well-being, and personal and professional support is higher (average = 3.21 and average = 3.24, compared to average = 2.74, respectively). Finally, in these schools, team members reflect more frequently on (actions concerning) pupil well-being (average = 3.02 and average = 3.04, compared to average = 2.68, respectively).

The differences found between Clusters 1 and 2, on the one hand, and Cluster 3 on the other, exhibit a strong statistical significance. The differences in school culture explain, in

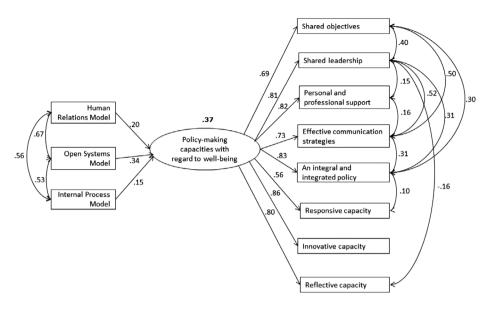


Figure 2. Path model.

each case, a minimum of 20% (shared objectives) and a maximum of 32% (reflective capacity) of the variance in the indicators of schools' pupil well-being policy-making capacities.

We find that schools, in which all the perspectives on effectiveness are strongly present, and schools, whose culture is strong on flexibility, but weak on control, show no statistically significant differences from each other. Therefore, it appears that primarily the flexible perspectives on effectiveness have a positive impact on pupil well-being policy-making capacities. However, the impact of control-oriented perspectives on effectiveness is small. Our next step was to research the unique correlation of the various perspectives on effectiveness with pupil well-being policy-making capacities at the respondent level, using a path analysis. Figure 2 provides a visual representation of the results of the path analysis.

The relationship between the "rational goal model" and the policy-making capacities of schools is not included in the model, as this relationship was revealed to not be statistically significant. Including the impact of the "rational goal model" on policy-making capacities is, therefore, not useful in defining perspectives on effectiveness, which have an impact on schools' pupil well-being policy-making capacities. The fact that the relationship between the "rational goal model" and policy-making capacities is not statistically significant, is consistent with the findings from the post hoc analyses based on the clusters.

The "internal process model", the "human resource model" and the "open systems model" have a statistically significant positive impact on how schools formulate their policy with regard to pupil well-being. This effect runs via pupil well-being policy-making capacities. Consequently, the impact of school culture on pupil well-being policy-making capacities is expressed to a greater, or lesser, degree in the extent to which shared objectives are perceived ("shared objectives"), and in the extent to which responsibility for pupil well-being is shared within the school team ("shared leadership"). Depending on the school culture, schools differ in the extent to which the team works together to promote pupil well-being internally, and creates permanent personal and professional support ("personal and professional support"), and in the extent to which there is open communication with regard to pupil well-being

("effective communication strategies"). Furthermore, the impact of the "internal process model", the "human resource model" and the "open systems model" on pupil well-being policy-making capacities becomes clear in the extent to which the policy is approached in an integrated fashion ("integrated policy"), and in the extent to which there is a response to expectations from the school's social context ("responsive capacity"). To conclude, the aforementioned types of school culture explain the differences in the extent to which each school's team approaches pupil well-being in an innovative way ("innovative capacity"), and in the extent to which there is reflection on (actions with regard to) pupil well-being ("reflective capacity").

The "open systems model" has the strongest positive impact on pupil well-being policy-making capacities. The standardised regression coefficient of 0.34 denotes that the "open systems model" explains 12% of the variance in policy-making capacities. The more teachers perceive the "open systems model" to be applicable to their school, the stronger they also rate the school's pupil well-being policy-making capacities.

With a standardised regression coefficient of 0.20, the impact of the "human resource model" is smaller than that of the "open systems model". Four per cent of the differences in teachers' perception of policy-making with regard to pupil well-being in their school can be explained by the underlying values of the "human resource model". The impact of this effectiveness perspective is therefore limited, although still statistically significant.

The smallest impact that we observe on how pupil well-being policy is formulated in schools comes from the "internal process model". With a standardised regression coefficient of 0.15, this effectiveness perspective has the weakest positive impact on policy-making capacities. A stronger perception of the "internal process model" results in the perception of policy-making with regard to pupil well-being at school also being more positive. Teachers' perception of the underlying values of the "internal process model" in their school, explains 2% of their perception of the school's pupil well-being policy-making capacities.

The aforementioned perspectives on effectiveness explain, in total, 12% of the variance in pupil well-being policy-making capacities. Twelve per cent of the differences in teachers' perception of policy-making, with regard to pupil well-being, can therefore be attributed to the school culture as perceived by individual teachers within each school.

The path analysis gives an accurate insight into the conceptual question as to the impact of various types of school culture on effectiveness with regard to pupil well-being. The impact of the "rational goal model" is not statistically significant. The positive impact of the "internal process model" on policy-making capacities is smaller than that of the "human resource model", and considerably smaller than that of the "open systems model". This analysis also reveals that school's pupil well-being policy-making capacities are more strongly influenced by flexible perspectives on effectiveness than by control perspectives on effectiveness.

#### **Conclusion and discussion**

In this study, using survey research, into Flemish primary schools we have examined: (1) how primary school teachers perceive their school's pupil well-being policy-making capacities; and (2) the impact that school culture has on pupil well-being policy-making capacities.

In line with how Flemish primary teachers perceive their school's care policy (Struyf et al. 2012), the descriptive data show that primary school teachers express themselves in positive terms concerning their school's pupil well-being policy-making. On average, teachers rate

each of the indicators of policy-making capacities positively. Shared objectives and shared leadership (Harris 2003; Laila 2015) are, according to teachers, most strongly present in their schools. Reflective capacity and responsive capacity (Segrott, Rothwell, and Thomas 2013; Thorburn 2015) are, according to them, less strongly present, even though these indicators are also, on average, still perceived to be applicable at their schools.

To sum up, we can therefore state that Flemish schools, at least according to their teachers, have the capacity to make a genuine contribution to pupil well-being. The social-emotional development of pupils is, therefore, not only a concern among specialists on sociological and educational matters. Schools too, are firmly committed to designing their policies in such a way that they are able to make a significant contribution to pupil well-being. These results confirm that schools and teachers are becoming increasingly aware of the importance of working towards promoting the well-being of their pupils (Coleman 2009; Crow 2008).

Equally important as the finding that teachers rate the capacities of Flemish schools to improve pupil well-being positively, is the question as to why certain schools are better able to do so than others. The results of this study indicate that the extent to which schools are successfully able to facilitate pupil well-being is influenced by the school's culture. Differences in schools' pupil well-being policy-making capacities can thus be attributed to differences in school culture.

School culture was operationalised using different perspectives on effectiveness ("human resource model", "open systems model", "internal process model" and "rational goal model"), which result from two dimensions: flexibility vs. control and internal vs. external focus (Quinn and Cameron 1999). We find the strongest influence on schools' policy-making capacities from the first dimension (flexibility vs. control). Moreover, it is primarily the flexible perspectives on effectiveness that appear to have a positive impact on schools' pupil well-being policy-making capacities. Flexible school cultures that are perceived to be externally oriented because of their responsive and adaptive characteristics make the strongest positive contribution on the school's pupil well-being policy-making capacities. Teachers that perceive their school as willing to interact in changes in the environment, estimate the policy-making capacities with regard to pupil well-being of their school most positively. Fairly limited impact is found for school cultures that are perceived as flexible and people oriented. Openness, collaboration, loyalty, involvement and motivation of the team members are less important for the capacities of the school to facilitate pupil well-being. Likewise, a culture that is primarily characterised by a clear delineation of responsibilities, a careful planning, and formalisation (the "internal process model") has only a slight positive impact on the school's policy-making capacities.

With a view to facilitating strong pupil well-being policy-making capacities in schools, the importance of sufficient organisational flexibility represents a significant finding. A first possible explanation for the influence of a flexible school culture on policy-making capacities is that there is currently a high expectation that schools will work towards promoting pupil well-being (Engels et al. 2004). Consequently, in order to formulate a policy on well-being, it is important that the school team has an awareness of developments in the field of well-being: a characteristic that is primarily found in the "open systems model". In addition, collaboration and consultation are characteristics of flexibility and are values that are primarily found in the "human resource model". Besides monitoring developments in the area of well-being, it is also important that the school team reaches a consensus and achieves

collaboration with regard to (the implementation of) initiatives in the area of pupil well-being (McLaughlin 2008; Opdenakker and Van Damme 2000).

### Implications and limitations

Given the importance of dealing with external expectations, and achieving consensus and collaboration within the school team, the school principal plays a key role in facilitating pupil well-being policy-making capacities. The extent to which the school team is prepared to work on well-being, and is able to develop strong policy-making capacities, will be partly dependent on the extent to which the school principal facilitates a flexible school culture. An important element in this is whether school principals themselves are prepared – and able – to respond to developments with regard to pupil well-being, within the school's social context, in a way that is compatible with the school's own needs (Quinn et al. 2003). In the first place, a great deal depends on the school principal's vision of pupil well-being. In schools where principals do not see pupil well-being as essential for learning, and where principals see "well-being" as just another educational buzzword, or as something which goes beyond their remit, it will be more difficult to reconcile expectations with respect to pupil well-being from the school's social context with those from within the school. Secondly, leadership style is also a decisive factor in the creation of a flexible school culture. In the interest of consensus building, the school principal must act as part of the team, and should encourage dialogue and collaboration on pupil well-being (Quinn et al. 2003).

The aim of this study was to make a contribution to school policy literature, and explain why schools differ in their policy-making capacities. We did this by demonstrating the statistically significant influence of school culture on pupil well-being policy-making capacities within schools. However, there are several conceptual and methodological footnotes and restrictions that need to be addressed.

Firstly, the questions whether results of this study can be to generalised to other policy-making activities (other than pupil well-being) needs further examination. It would be premature to conclude that the "open systems model" has the strongest positive impact in all policy areas. For example, if we had taken policy-making capacities with regard to staff management into account, the results might have been different. Future research is needed to compare the impact of different school cultures on policy-making capacities with regard to different policy areas. Secondly, we assume that external expectations to promote pupil well-being are a possible explanation for the influence of the "open systems model" on policy-making capacities. Parents' expectations to care about pupil well-being can be mainly met by schools that are willing to adapt to their (changing) environment (open system schools). Unfortunately, our empirical evidence for testing this hypothesis was not available in this study. Future research on the impact of school culture on pupil well-being policy-making capacities could clarify why the "open systems model" has such a strong impact on schools' policy-making capacities, compared to the other types of school culture. Finally, the methodology used has its limitations. Because individual respondent data were collected within schools, we decided to split individual level analyses and school level analyses. Although these analyses allow us to draw conclusions that are valid and reliable within the Flemish context, investigating the current research questions could have been conducted more neat by means of multilevel SEM. Unfortunately, the relatively small number of respondents per school (12 on average) and the great variation of respondents per school made that the power of our data sample was not sufficient for this analysing technique and could have biased the research results (Hox and Maas 2001). Another line for future research would be to complement the above findings with ethnographic research approaches. The research field would benefit from additional qualitative research into schools' policy attempts to increase their pupils' well-being. Especially in understanding the found relations and in building additional theory, this is a promising way forward.

We made it clear that school culture is a valid explanation to describe differences in the policy-making capacities of schools. This means that we should not think of school culture and school policy as freestanding concepts, but that we should create an integrated view in order to understand both the consequences and the strengths of changes in school culture for policy-making within schools.

#### **Disclosure statement**

No potential conflict of interest was reported by the authors.

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