



## Characteristics of Appraisal Systems that Promote Job Satisfaction of Teachers

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This article examines if and how characteristics of appraisal systems used for secondary school teachers affect job satisfaction. Using multilevel analyses on data of 3 473 teachers in Flanders (Belgium), we found that appraisals with a developmental purpose and appraisals perceived as being a fair judgement, both have a positive impact on job satisfaction. Also clarity of appraisals and appraisals perceived as a judgement of quality add to a specific view of job satisfaction. These findings provide significant implications for educational policy at diverse levels, aimed at designing and implementing more effective appraisal systems, which affect teachers in their careers.

### Problem Statement

Teacher job satisfaction has been an international issue of concern for many years (Zembylas and Papanastasiou, 2006). According to Bolin (2007), research on job satisfaction – as an extremely important topic in organizational administration and social psychology- has a history of nearly sixty years. The importance of job satisfaction emerges in e.g. research to the consequences of a lack of satisfaction. Teacher dissatisfaction turns out to be one of the main factors in teachers leaving the profession (Huberman, 1993; Woods et al. 1997), leading to a decrease in productivity (Tshannen-Moran, Woolfolk-Hoy and Hoy, 1998). In line with the latter consequence other authors also found negative effects of a decline in job satisfaction such as high level of claims for stress-related

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disabilities, increased absenteeism and a reduced ability to meet students' needs (Farber, 1991; Troman and Woods, 2000). As such, job satisfaction encroaches deeply on educational core processes. As a consequence job satisfaction is not only considered as an ultimate goal in itself but could have a positive impact on other aspects of the performance of teachers.

Given the power of job satisfaction within educational processes, the question raises how teacher satisfaction could be optimized. Several aspects affecting teachers' job satisfaction emerge. Ma and MacMillan (2001) for example suggest that factors affecting teachers' job satisfaction can be divided into three areas: (a) teachers' feelings of competence, (b) administrative control, and (c) organizational culture. Another classification makes a distinction between individual and school characteristics as predictors for job satisfaction (Spear, Gould and Lee, 2000). Analysing data on job satisfaction, covering areas such as working conditions, roles and responsibilities and classroom practices, Poppleton (1989) concludes that only intrinsic aspects of teaching make an important contribution to job satisfaction. As regards teachers' feelings of competence as an individual characteristic, Capara et al. (2003) found that teachers' believe of self-efficacy has a statistically significant impact on their job satisfaction.

Other elements affect teachers' job satisfaction as well. From a broad organisational perspective, we can point for instance to the positive relationship between experiences with appraisals and organisational commitment of the employee, and to the positive relationship between the latter and job satisfaction (Youngcourt, Leiva and Jones, 2007). In line with the findings of Pettijohn, Pettijohn and d'Amico (2001) within the domain of sales, Kelly et al. (2008) found in Singapore primary schools that fairness of the performance appraisal system, clarity of appraisal criteria, and using appraisal criteria that are controllable, are related to higher job satisfaction. Other concepts included in this study which also could have an indirect impact on job satisfaction throughout teacher appraisal are, similar to Youngcourt et al. (2007) and Conley, Muncey and You (2005), satisfaction with the appraisal system; and furthermore stress experienced with the appraisal system, attitude towards performance

bonus, cooperativeness among teachers and motivation. Interesting about this model is that satisfaction with the appraisal system was included in the model as a dependent variable, and not as possibly mediating with job satisfaction.

While it is known that teacher appraisal has a direct impact on job satisfaction, appraisal additionally and indirectly empowers job satisfaction. Earlier research points to the implementation of teacher appraisal as a means to influence quality of instruction (Timperley and Robinson, 1997). High performing schools (or school systems) distinguish themselves by implementing teacher appraisal and feedback systems, working with individual teachers and supporting effective teaching practices (OECD, 2011). Classroom instruction and student outcomes can be significantly affected by appraisal and feedback because these practices recognise and expand teachers' strengths while at the same time teachers are challenged to address weaknesses in their pedagogical practices (Santiago and Benavides, 2009; Jensen and Reichl, 2011). Teachers who are intrinsically motivated and who are willing to professionally develop themselves, would be more satisfied with their job (van den Berg, 2002; Dinham and Scott, 2002). Also Kelly et al. (2008) emphasize the possible impact of the appraisal system on teachers' attitudes and behaviours which can affect their performance.

In order to learn about the characteristics of teacher appraisal which can, as already mentioned, impact on teacher job satisfaction, Conley et al. (2005) tested the plausibility of a conceptual model specifying linkages among perceptions of characteristics of standards-based evaluation (understandable/relevant standards, satisfactory/helpful appraisal), work environment mediators (role ambiguity, effort performance-rating linkage, work criteria autonomy) and career satisfaction, organizational commitment, and perceptions of the effectiveness of the appraisal system. Their findings show that characteristics of appraisal have an indirect effect on career satisfaction, with mediating factors 'role ambiguity' and 'work criteria autonomy'. There is evidence within the field of education in particular, that job satisfaction may be influenced in a positive way by the appraisal process.

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This explains why for instance in Flanders, policies on appraisal and/or feedback are implemented, though these practices are not (yet) used very frequently. Since 2007 and 2009 (for secondary education and primary education respectively), school principals in Flanders have been responsible for evaluating their teachers in relation to their job description. For the first time in Flanders, the current legislation offers a frame of reference for a constructive personnel management –in this case developmental appraisal policy – within education, and also initiates research related to this. The appraisal should be interpreted as a constructive, developmental process in which support and guidance of the teacher play an important part. The framework for these appraisals is set out by the government, but school boards have sufficient autonomy to put this into practice. Consequently, these appraisals form a key role in the personnel management of schools.

As in many educational systems, little is known about the nature of the appraisal process in Flemish schools. The Flemish appraisal system has been the focus in few empirical studies. Except for research on (the influence of school leadership on) teachers' perception of the new teacher appraisal policy (Tuytens and Devos, 2008; Tuytens and Devos, 2009), no (other) research findings are available. Studies analyzing the emotional and motivational functioning of teachers (e.g. job satisfaction) however show systematic between-school differences (Klussman et al. 2008). Insights within this domain could therefore serve as a guiding principle for designing more effective systems of appraisal and/or feedback, and could thus stimulate relevant attitudinal outcomes, such as job satisfaction. In conducting this study, we therefore want to learn through multilevel analyses if characteristics of teacher appraisal are related to teachers' job satisfaction, at both the individual teacher and school level in Flanders. Our central research question is twofold: (1) Is there an effect of teacher appraisal on job satisfaction? and (2) Which characteristics of appraisals determine job satisfaction of teachers?

## **Conceptual Framework and Operationalization**

The existing knowledge base indicates that if appraisal systems are based on clear criteria, appraisal can increase job satisfaction (Pettijohn et al. 2001; Kelly et al. 2007; Conley et al. 2005). Also, a perceived developmental purpose yields a positive relationship with job satisfaction (Youngcourt et al. 2007), and fairness of the performance appraisal system is related to higher job satisfaction (Kelly et al. 2007). As we will show in the following conceptual framework, this study investigates the cumulative impact of these specific characteristics of appraisals on job satisfaction within the field of Flemish education in particular. Both the dependent and the constituent independent variables in the conceptual model are illuminated (see Table 1 for an overview).

### ***Aspects of job satisfaction***

Despite the common agreed upon importance of teachers' job satisfaction, it is hard to find a sound definition of what one understands by job satisfaction (Dinham and Scott, 2002; van den Berg, 2002), which consequently pushes forward a problem of construct validity in research in the field (Evans, 1997). According to Lawler (1973) it can be argued that job satisfaction could be seen as a teacher's affective relation to his or her teaching role, and is rather a function of the perceived relationship between what one wants from teaching and what one perceives it is offering to a teacher. Following Evans (1997, p. 833) teacher job satisfaction is an ambiguous term and she suggests to define it as "a state of mind determined by the extent to which the individual perceives her/his job-related needs to be being met". Moreover Evans (1997) distinguishes two terms: job comfort and job fulfilment. The former refers to things that are satisfactory, the latter is related to things which are satisfying.

In this study, job satisfaction was measured both as a change in teachers' satisfaction given a certain circumstance (being the appraisal and/or feedback received) and as an overall construct, by the following items respectively: "Concerning the appraisal and/or feedback you have received at this school, to what extent have they directly led to changes in your job satisfaction?"; and "All in all, I

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am satisfied with my job.” (See table 1). Referring to the cited literature above, we hypothesize (hypothesis a) that both operationalizations of teacher job satisfaction are positively influenced by an appraisal system.

*Table 1: Independent and dependent variables*

Variable type	Variable	Operationalization	Response categories
Independent variables	(Developmental) perspective of the appraisal system	“I think the appraisal of my work was helpful in the development of my work as a teacher in this school.”	Disagree vs. agree
	Fairness of the appraisal (system)	“I think the appraisal of my work was a fair assessment of my work as a teacher in this school.”	Disagree vs. agree
	Clarity of the appraisal criteria	“In your opinion, how important were the following aspects considered to be when you received this appraisal?”	For each aspect: I do not know if it was considered vs. I know it was considered
	Appraisal as judgement of the quality	”The appraisal contained a judgment about the quality of my work.”	Yes vs. no
Dependent variables	Change in job satisfaction	“Concerning the appraisal and/or feedback you have received at this school, to what extent have they directly led to changes in your job satisfaction?”	Decrease /no change vs. increase
	Teacher job satisfaction	“All in all, I am satisfied with my job.”	Not satisfied vs. satisfied

### ***Characteristics of appraisal systems***

Literature shows that the level of teachers' job satisfaction depends on (aspects of) the appraisal system used. Three different features of appraisal systems will be highlighted in this study: policy perspectives on teacher appraisal, perceived fairness of teacher appraisal and transparency of teacher appraisal. In this survey, 'appraisal' was defined as when a teacher's work is reviewed by the principal, an external inspector or by his or her colleagues. This appraisal can be conducted in a range of ways from a more formal, objective approach (e.g. as part of a formal performance management system, involving set procedures and criteria) to the more informal, more subjective approach (e.g. through informal discussions with the teacher). 'Feedback' was defined as the reporting of the results of a review of the work (however formal or informal that review was) back to the teacher, often with the purpose of noting good performance or identifying areas for development. Again, the feedback may be provided formally (e.g. through a written report) or informally (e.g. through discussions with the teacher).

*Policy perspectives on teacher appraisal.* Since teachers can be considered as human resources within educational organisations, the concepts and relationships in the discourse of human resource management are relevant within the context of education. According to the literature different perspectives on appraisals can be distinguished. On the one hand, from an accountability perspective, we identify summative appraisals serving rather more within processes of quality assurance. Formative appraisals, on the other hand, start from a professional development perspective and can move beyond quality assurance to help teachers develop their pedagogical practices (Bartram, 2004; Isoré, 2009; Santiago and Benavides, 2009; Stronge, 2006). Youngcourt et al. (2007) focused their attention to the purposes of performance appraisal, and indicate a comparable distinction between performance appraisals with a view to developing individuals (distinguishing within individuals) and performance appraisals for administrative purposes (distinguishing among individuals). In addition to this, they introduce a third perspective: performance appraisals serving a role definition

purpose, which focus on the position, rather than on the individual within the position. The distinction between evaluating from a developmental perspective and evaluating from an accountability perspective is also common knowledge within the field of education. This distinction is applicable whatever the object one is evaluating. Whether it is about schools, teachers or students; an appraisal may be focused on improving the functioning of the school, the teacher or the student, or on judging the performance (of the school, the teacher or the student) (Vanhoof and Van Petegem, 2007). In this article, obviously, (only) the teacher is considered.

The findings of Youngcourt et al. (2007) go further than those of Boswell and Boudreau (2000), who included only the two traditional perspectives in their model, and –except for employee satisfaction with the appraiser–did not consider any other attitudinal outcomes. Youngcourt et al. (2007) reveal that the perception of the different purposes of performance appraisals is related differently to a set of attitudinal variables. Perceived developmental purpose for example, yielded direct relationships with job satisfaction.

Based on the literature, cited above, we can formulate the next hypothesis: Appraisals held in a developmental perspective have a positive impact on job satisfaction (hypothesis b). Although Youngcourt et al. (2007) found the effect of developmental purpose on job satisfaction being mediated by affective organisational commitment, we assume that teacher job satisfaction is influenced directly by appraisals conducted from a developmental perspective. The perspective of the appraisal system was measured in our study by the following item (see Table 1): “I think the appraisal of my work and/or feedback received was helpful in the development of my work as a teacher in this school.”

*Perceived fairness of appraisal systems.* Research of Pettijohn, Pettijohn and d’Amico (2001) took a close look at the effect of performance appraisal characteristics on job satisfaction. They state that the performance of the appraisal or appraisal process is the key to reducing ambiguity, and thereby increasing job satisfaction. It appeared that (the perception of) fairness of the appraisal relates positively to job satisfaction. An appraisal is considered to be fair by



appraisees when they can agree with the judgement received (Colby, Bradshaw and Joyner, 2002; Santiago et al. 2009; Stronge and Tucker, 1999). Perceived fairness is related to procedural and distributive justice aspects of an appraisal. Procedural aspects are about procedures followed during the appraisal, such as the way appraisal criteria are elaborated and the existence of an appeal procedure (Heneman and Milanowski, 2003; Kelly et al. 2008; Thurston and McNall, 2010). Distributive justice points to the perception that the received appraisal reflects the actual performance of the teacher (Kelly et al. 2008; Thurston and McNall, 2010). Given these research findings we assume appraisals perceived as being a fair judgement impact positively on job satisfaction (hypothesis c). Within their own setting, both Pettijohn et al. (2001) and Kelly et al. (2007) assert that job satisfaction is positively influenced by (perceived) fairness of appraisal (system). We seek to address this relationship for Flanders as well using our data. This appraisal characteristic was administered with the question “I think the appraisal of my work and/or feedback received was a fair assessment of my work as a teacher in this school.” (see Table 1).

*Transparency of teacher appraisal.* Furthermore, in considering job satisfaction, empirical evidence already confirmed the importance of clear criteria that meet with the person’s approval and appraisals that are used in determining rewards (Kelly et al. 2008; Pettijohn et al. 2001). When appraisal systems are initiated, it is crucial to set up understandable performance goals and appraisal criteria in order to motivate teachers and with the object teachers knowing what to work towards (Locke and Latham, 2002). Transparency also includes a clear communication towards teachers and a well understanding of the appraisal system and criteria by teachers (Darling-Hammond, Wise and Pease, 1983). Earlier research revealed that purposes of teacher appraisals are often not clear to them and that this shortage of clarity threatens the effectiveness of appraisal systems (Gratton, 2004). We presume transparency and/or clarity of the appraisal system have a positive impact on job satisfaction (hypothesis d). In other words, the more transparent criteria are considered in the appraisal to teachers, the higher the potential impact on job satisfaction. This hypothesis is consistent with research findings

emphasizing that clear appraisal criteria (Pettijohn et al. 2001), understandable/relevant standards (Conley et al. 2005), and clarity of appraisal criteria (Kelly et al. 2007) positively influence job satisfaction. To grasp the concept of transparency or clarity in our questionnaire, respondents were asked to indicate to what extent they thought aspects of appraisal or feedback were considered in the appraisal they received: “In your opinion, how important were the following aspects considered to be when you received this appraisal and/or feedback?” (see Table 1).

## **Method**

This article reports on a survey conducted among a representative sample of Flemish lower secondary school teachers (ISCED 2). The questionnaire examined teachers’ job satisfaction and perception of the appraisal system in their schools. The data used in this study stem from the Flemish Teaching And Learning International Survey (TALIS), that focused on the learning environment and the working conditions of teachers in schools. In TALIS rigorous technical and operational procedures were applied (e.g. regarding sampling, translation of instruments, data-collection etc.).

The sampling of Flemish teachers followed a stratified two-stage approach: drawing a school sample from which a teacher sample could be drawn. Schools were randomly selected with a probability proportional to size. Also teachers were randomly selected to take part in the survey. In sum, data are available for 197 Flemish schools and a 3 473 teachers. The weighted teacher participation rate within all participating schools is 85.1%. 88.6% of the teachers completed the questionnaire on line; the other teachers via paper-and-pencil. 90.2% of the participating teachers indicated that they had received an appraisal and/or feedback about their work as a teacher -at least once- from one source or more (principal, other teachers or members of the school management team, or an external individual or body). Given the research questions set forward, only the data gathered by these specific teachers were analysed. Aside the variables mentioned in table 1, the following set of co-variants was analysed: age, gender, employment status (full-time, 50-90% of full-time hours, less than 50% of full-time hours), contract (permanent, fixed term for more

than 1 school-year, fixed term for less than 1 school-year), highest level of formal education (ISCED level 5B, ISCED level 5A Bachelor degree, ISCED level 5A Masters degree or above), years of experience as a teacher (10 years or less, 11-20 years, more than 20 years), and educational network (community education, subsidised private education, and subsidised public education).

Given the measurement level of the dependent (and independent) variables log-linear statistical techniques had to be used. In order to take into account the variance associated with different levels of nesting (as the case may be, teachers within schools) multilevel analysis were required. In the next section the results of two log-linear multilevel regression analysis for both dependant variables are reported.

## **Results**

The multilevel analyses are run for each dependent variable separately, notably change in job satisfaction as a result from appraisal/feedback (model 1) and job satisfaction as an overall construct (model 2). In interpreting the results of both analyses, we distinguish between the null model, the restricted model and the full model (see table 1). The null model does not contain explanatory variables. It enables us to answer the first research question. In the restricted model, we added the appraisal/feedback-related variables we assume -in the conceptual framework- having statistical significant explanatory power. Finally, in the full model, all variables (including co-variants) were included, in order to check whether the effects of the characteristics of appraisal/feedback still remain after controlling for the co-variants. For each explanatory variable, table 1 presents the estimated coefficient and - between brackets - the standard error. Statistically significant effects are printed in bold. Furthermore, in view of the interpretation, it is important to know that all variables – except for clarity of the appraisal criteria and age - are dummy variables. As regards clarity of the appraisal criteria, we first calculated the number of appraisal criteria of which respondents indicated ‘I do know it was considered’. Afterwards this sum score was standardised. The higher the value on this variable, the more clear the appraisal/feedback. The variable ‘Age’ was centred around the grand mean.

From the first null model we learn that a statistically significant part of the variance in job satisfaction is accounted for by differences between schools. As such, opting for a multi-level approach turns out to be a correct choice. In the next paragraphs the results of the two multi-level analyses are described consecutively.

The restricted model for 'Change in job satisfaction' confirms our general hypothesis. The fit of the restricted model is statistically significant better compared to the null model. The four characteristics of appraisal/feedback have a statistically significant positive effect on experiencing an increase in job satisfaction after receiving feedback. In sum, teachers who indicate that the appraisal contained a judgment about the quality of their work, teachers who indicate the appraisal was a fair assessment of their work as a teacher, teachers who indicate the appraisal was helpful in the development of their work as a teacher, and teachers who have a clear view on the criteria that have been used in the appraisal/feedback, have a significantly higher probability of experiencing an increase in job satisfaction. These variables prove to be critical in explaining differences in 'Change in job satisfaction'. Even though the full model for 'Change in job satisfaction' shows a significant improvement in model fit compared to the restricted model, the effect of the hypothesized predictors keeps standing. Moreover, none of the other regression parameters related to teacher or school characteristics turns out to be statistically significant after controlling for the other variables.

In order to increase our understanding of the reported effects, we also look at the conditional probabilities of the significant predictors (see Table 3). These are the probabilities of having an increase in job satisfaction given a certain condition; for example, given appraisal being helpful in the development of their work as a teacher. The probability of having an increase in job satisfaction after appraisal is .41 ( $\text{EXP}(-0.37) = 0.69$ ;  $= 0.69/(1 + 0.69) = 0.41$ ). This finding actually answers the first research question. The chance that teachers report an increase in job satisfaction after receiving appraisal/feedback is 0.41.

Table 2: Multilevel logistic models for two different measurements of job satisfaction.

	Model 1		Model 2	
	Change in job satisfaction (decrease or no change versus increase)		Job satisfaction (not satisfied versus satisfied)	
	null model	restricted model	full model	restricted model
<b>FIXED</b>	estimated parameter (SE)		estimated parameter (SE)	
Intercept	<b>-3.7 (.06)</b>	<b>-2.96 (.21)</b>	<b>-3.06 (.29)</b>	<b>1.44 (.18)</b>
<i>Predictors: characteristics of appraisal/feedback</i>				
Judgement of quality (vs. no quality judgement)		<b>.70 (.11)</b>	<b>.73 (.12)</b>	.32 (.19)
Fair (vs. not fair)		<b>1.28 (.20)</b>	<b>1.28 (.23)</b>	<b>.71 (.23)</b>
Helpful in development of work (vs. not helpful)		<b>1.02 (.14)</b>	<b>.98 (.18)</b>	<b>.81 (.21)</b>
Clear/transparent (vs. not fully clear/transparent)		<b>.12 (.04)</b>	<b>.11 (.05)</b>	<b>.11 (.07)</b>
<i>Predictors: teacher characteristics</i>				
Age			<b>-.03 (.10)</b>	.01 (.02)
Male (vs. female)			<b>-.04 (.09)</b>	<b>-.44 (.18)</b>
Part-time employment (50-90%) (vs. full-time)			<b>.10 (.14)</b>	<b>.15 (.24)</b>
Part-time employment (<50%) (vs. full-time)			<b>.19 (.38)</b>	<b>-.29 (.54)</b>
Fixed-term contract (> 1 year) (vs. permanent)			<b>-.27 (.30)</b>	<b>.64 (.54)</b>
Fixed-term contract (< 1 year) (vs. permanent)			<b>.20 (.15)</b>	<b>-.45 (.26)</b>
Below ISCED level B (vs. ISCED level B)			<b>.07 (.31)</b>	<b>-.51 (.31)</b>
ISCED Level 5A degree or higher (vs. ISCED level B)			<b>.27 (.17)</b>	<b>.19 (.27)</b>
Teaching: 11-20 years (vs. 10 years or less)			<b>-.08 (.17)</b>	<b>.28 (.30)</b>
Teaching: more than 20 years (vs. 10 years or less)			<b>-.23 (.28)</b>	<b>-.12 (.40)</b>
<i>Predictors: school characteristics</i>				
Subsidised private education (vs. community education)			<b>.17 (.12)</b>	<b>.22 (.20)</b>
Subsidised public education (vs. community education)			<b>.24 (.16)</b>	<b>-.17 (.31)</b>
<b>VARIABLE</b>	estimated parameter (SE)		estimated parameter (SE)	
Variance at school level	<b>.09 (.05)</b>	<b>.10 (.04)</b>	<b>.05 (.05)</b>	<b>.08 (.13)</b>
<b>MODEL FIT</b>				
deviance	4 805.51	4 137.98	3 679.2	-300.2
improvement in model fit (p)	.000	.000	.000	.000

From Table 3 we learn that the conditional probability of having an increase in job satisfaction, given that the appraisal is fair, helpful, clear (transparent), and a quality judgement, is higher (.48). However, if teachers report the appraisal to be unfair, unhelpful, not transparent and not containing a judgment of quality, the probability of having an increase in job satisfaction drops to 0.05. A similar, but less pronounced decrease in the the probability of having an increase in job satisfaction can be found when only one of the characteristics of appraisal is in place.

*Table 3. (Conditional) probabilities of reporting (an increase in) job satisfaction*

		Probability of reporting an increase in job satisfaction as a result of appraisal = 0.41				<i>Conditional probability</i>
		Fair	Helpfull	Clear/ Transparant	Judgment of quality	
Model 1: Change in job satisfaction	No	No	No	No	<b>.05</b>	
	Yes	No	No	No	<b>.16</b>	
	No	Yes	No	No	<b>.13</b>	
	No	No	Yes	No	<b>.04</b>	
	No	No	No	Yes	<b>.09</b>	
	Yes	Yes	Yes	Yes	<b>.48</b>	
	Probability of being satisfied with job = 0.94					
Model 2: Job satisfaction	Fair	Helpfull			<i>Conditional probability</i>	
	No	No			<b>.81</b>	
	Yes	No			<b>.90</b>	
	No	Yes			<b>.90</b>	
	Yes	Yes			<b>.95</b>	

Table 2 also presents the results of the analyses for the second dependent variable, being ‘Job satisfaction’. As regards the restricted model, we notice that (only) two characteristics of appraisal/feedback have a significant effect on the general job satisfaction of teachers: teachers who indicate the appraisal was a fair assessment of their work as a teacher, and teachers who indicate the appraisal was helpful in the development of their work as a teacher, have a significantly higher probability of being satisfied with their job. Again, none of the other regression parameters related to teacher or school characteristics is statistically significant (see full model). But we do find an extra significant effect of clarity of the

appraisal/feedback. Table 3 presents the conditional probabilities of the two significant predictors in the restricted model. The probability of being satisfied with one's job is .94 ( $\text{EXP}(2.81) = 16.61$ ;  $16.61/(1 + 16.61) = 0.94$ ). As such we do find a very large group of Flemish secondary school teachers that indicate that they have a strong job satisfaction. When the appraisal is fair and helpful for the development of one's work, the conditional probability is .95, as opposed to .81 when the appraisal/feedback is not fair and not helpful.

### **Discussion and Conclusions**

This study aimed to find out if and under what conditions job satisfaction is affected by teacher appraisal. Our findings reveal first of all that for lower secondary teachers in Flanders receiving appraisal can indeed make a difference in their job satisfaction (cf. research question 1). The probability of teachers reporting an increase in job satisfaction after an appraisal is generally spoken 4 out of 10. Although this is quite a lot, it also means that most teachers report no increase or even a decrease in job satisfaction after receiving an appraisal (cf. hypothesis a). Our results, however, also clearly show the importance of specific conditions related to the appraisal. If none of the appraisal characteristics that was studied is in place, hardly any teacher reports an increase in job satisfaction as a result of the appraisal. The fulfilment of all studied characteristics seems to be a powerful leverage for increasing job satisfaction though, which means an appraisal has to be well developed in order to expect it to have a positive effect on teacher job satisfaction.

Aside from the above general conclusions, we also like to turn to the more specific hypotheses that emerged in the conceptual framework and that were tested in the analyses to answer research question 2. In that regard, to start with, we found strong evidence for both hypothesis b and hypothesis c. This means that appraisal with a developmental purpose and appraisal that is perceived to be a fair assessment have indeed a positive impact on increase of job satisfaction after appraisal and positively correlate with job satisfaction in general. Our multilevel logistic regression analyses revealed that teachers who indicate that the appraisal they received

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was helpful in the development of their work as a teacher, have a significantly higher probability of experiencing an increase in job satisfaction and of being satisfied with their job. Reworded, appraisals held in a developmental perspective, are more likely to have a positive impact on job satisfaction. As such, our findings support empirical evidence from Youngcourt et al. (2007) suggesting that a developmental appraisal purpose yields positive relationships with job satisfaction. What also emerges is that teachers who indicate that the appraisal was a fair assessment of their work as a teacher, have a significantly higher probability of experiencing an increase in job satisfaction after the appraisal and of being satisfied with their job. In other words, appraisals perceived as being a fair judgement, impact positively on job satisfaction. This is in line with the evidence of Pettijohn et al. (2001) - albeit in a different context - that when appraisals are perceived as being fair, job satisfaction increases, and also with the claim of Kelly et al. (2007) that fairness of the performance appraisal system is related to higher job satisfaction. Please note that we see this, pending on additional cross-context studies of course, as an indication that the above findings are likely to be consistent over different contexts.

Whilst the conclusions on hypotheses b and c are rather straightforward, the findings related to impact of transparency and clarity of the appraisal system (cf. hypothesis d), are less univocal to interpret. The effect of transparency of appraisal on job satisfaction in general does not appear to be statistically significant. But as we presented clear evidence that transparency of the appraisal system does increase job satisfaction, we conclude that our results do not refute the hypothesis as it was set forward. As such, this study confirms findings of Pettijohn et al. (2001), Kelly et al. (2007) and Conley et al. (2005) indicating that transparency and clarity of appraisals is an important prerequisite for appraisals to result in an increase in job satisfaction.

As regards the fourth characteristic of appraisals we studied, the results suggest a positive effect of the perception of appraisals being a judgement of the quality of the teacher's work, on change in job satisfaction. More in specific, teachers who indicate that the appraisal they received included a judgement of the quality of their



work, have a significantly higher probability of experiencing an increase in job satisfaction. This effect is in some way limited though, as it was not found when job satisfaction in general was considered: the probability of being satisfied with the job is not different for teachers who's appraisal did contain a judgement of the quality of their work in comparison with those for whom this is not the case.

The above findings also have implications for researchers that aim to study the effect of appraisal systems on job satisfaction more broadly and deeply. These implication are both content and methodology related. Although this study also took several other variables into consideration that are not directly related to appraisal, no other effects on (increase of) job satisfaction were found after controlling for characteristics of the appraisal. Although the dataset enabled analysis with strong power, no effect of age, gender, type of employment, level of education, teaching experience and school denomination was found. Nonetheless we see the further exploration of school characteristics as a promising study domain for future research. Skaalvik & Skaalvik (2009) for instance found school context to be a relevant dimension to consider, given its specific impact on job satisfaction. The only school variable we were able to include in our analyses was school denomination, while we could think of other relevant variables shaping the school context: shared and educational leadership, participation in decision-making and culture of reflective enquiry for instance. Therefore, we would suggest future research also taking into account these kinds of context variables, when studying job satisfaction of teachers in relation to teacher appraisals. Apart from the school context, further research should also enable a more detailed measurement of the variables under scrutiny. The results of this study demonstrate that statistically significant differences at school level do occur. However, most variance is located at the teacher level. This finding leads to the recommendation to use a multi-level approach in future research to take this distribution of variance into account. Supplementing existing quantitative analyses with in-depth qualitative research would also contribute to our understanding of how processes of teacher appraisal lead (or do not lead) to an

increase of job satisfaction. Regardless of these limitations, the multilevel log linear analyses of data from a representative sample of Flemish school teachers did build in guarantees for generalizability. Furthermore, the testing of hypotheses that were based on the current knowledge base pushes future theory development by confirmation and nuance. Especially because of the joint analysis of relevant characteristics of teacher appraisal the above article is an innovative contribution.

Moreover, aside for the academic relevance, findings are also relevant for policy and practice. Since the results of this study show that appraisal systems only affect teacher job satisfaction in a positive way if well-defined conditions are in place, implications are quite self-evident. Policy makers, school governing boards and of course school principals can be triggered by the above conclusions to question current appraisal systems and to shape future innovations in line with the existing evidence on what contributes to effective appraisal systems in relation to job satisfaction. After all, we clearly showed that when appraisals are set up from a developmental perspective and contain a judgement of quality on the one hand and are perceived to be fair and transparent on the other hand, chances of impacting positively on teachers' job satisfaction significantly increase.

## References

- Bartram, D. 2004. Assessment in organisations. *Applied Psychology: An International Review*, 53(2), 237-259.
- Bolin, F. 2007. A study of teacher job satisfaction and factors that influence it. *Chinese Education and Society*, 40(5), 47-64.
- Boswell, W.R. and J.W. Boudreau. 2000. Employee attitudinal effects of perceived performance appraisal use. *Human Resource Development Quarterly*, 11(3), 283-299.
- Capara, G. V., C. Barbaranelli, L. Borgogni and P. Steva, P. 2003. Efficacy Beliefs as Determinants of Teachers' Job Satisfaction. *Journal of Educational Psychology*, 95(4), 821-832.
- Colby, S. A., L.K. Bradshaw and R.L. Joyner. 2002. *Teacher evaluation: A review of the literature*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

- Conley, S., D.E. Muncey and S. You. 2005. Standards-based evaluation and teacher career satisfaction: a structural equation modeling analysis. *Journal of Personnel Evaluation in Education*, 18, 39-65.
- Darling-Hammond, L., A.E. Wise and S.R. Pease. 1983. Teacher evaluation in the organizational context: a review of the literature. *Review of Educational Research*, 53(3), 285-327.
- Dinham, S. and C. Scott. 2002. *The international Teacher 2000 Project: an international study of teacher and school executive satisfaction, motivation and health in Australia, England, USA, Malta and New Zealand*. Paper presented at the Challenging Futures Conference, University of England, Armidale.
- Farber, B. A. 1991. *Crisis in Education: Stress and Burnout in the American Teacher*. Jossey-Bass, San Francisco, CA.
- Gratton, R. 2004. Teacher appraisal: a lesson on confusion over purpose. *International Journal of Educational Management*, 18(8), 292-296.
- Heneman, H. G. and A.T. Milanowski. 2003. Continuing assessment of teacher reaction to a standards-based teacher evaluation system. *Journal of Personnel Evaluation in Education*, 17(2), 173-195.
- Hoppock, R. 1935. *Job satisfaction*, N.Y., Harper.
- Huberman, M. 1993. *The Lives of Teachers*. Cassell, London.
- Isoré, M. 2009. Teacher evaluation: Current practices in OECD countries and a literature review. OECD Education Working Paper.
- Jensen, B. and J. Reichl. 2011. Better teacher appraisal and feedback: Improving performance, Grattan Institute, Melbourne.
- Kelly, K.O., S.Y.A. Ang, W.L. Chong and W.S. Hu. 2008. Teacher appraisal and its outcomes in Singapore primary schools. *Journal of Educational Administration*, 46(1), 39-54.
- Klussman, U., M. Kunter, U. Trautwein, O. Lüdtke and J. Baumert. 2008. Engagement and emotional exhaustion in teachers: does the school context make a difference? *Applied Psychology: An International Review*, 57, 127-151.
- Lawler, E. E., III. 1973. *Motivation in Work Organizations*. Brooks/Cole, Monterey, CA.
- Locke, E. A. and G.P. Latham. 2002. Building a practically useful theory of goal setting and task motivation. *American Psychologist*, 57(9), 705-717.
- Ma, X. and R.B. MacMillan. 1999. Influences of Workplace Conditions on Teachers' Job Satisfaction. *Journal of Educational Research*. 93(1), 39-47.

- OECD. 2011. *Teaching And Learning International Survey 2013. Conceptual Framework*. Paris: OECD
- Pettijohn, C.E., L.S. Pettijohn and M. d'Amico. 2001. Characteristics of performance appraisals and their impact on sales force satisfaction. *Human Resource Development Quarterly*, 12(2), 127-146.
- Poppleton, P. 1989. Rewards and values in secondary teachers' perception of their job satisfaction. *Research papers in education*, 4(3), 71-94.
- Rasbash, J., C. Charlton, W.J. Browne, M. Healy and B. Cameron. 2009. *MLwiN Version 2.10*. Centre for Multilevel Modelling, University of Bristol.
- Rasbash, J., F. Steele, W.J. Browne and H. Goldstein. 2009. *A User's Guide to MLwiN, v2.0*. Centre for Multilevel Modelling, University of Bristol.
- Santiago, P. and F. Benavides. 2009. *Teacher Evaluation: A Conceptual Framework and Examples of Country Practices*. OECD.
- Santiago, P., D. Roseveare, G. van Amelsvoort and J. Manzi. 2009. *Teacher evaluation in Portugal: OECD review*. OECD.
- Skaalvik, E.M. and S. Skaalvik. 2009. Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education*, 25(3), 518-524.
- Spear, M., K. Gould and B. Lee. 2000. *What Would be a Teacher? A Review of Factors Motivating and Demotivating Prospective and Practising Teachers*. NFER, Slough.
- Stronge, J.H. 2006. *Evaluating teaching. A guide to current thinking and best practice*. Thousand Oaks: Corwin Press.
- Stronge, J. H., and P.D. Tucker. 1999. The Politics of Teacher Evaluation: A Case Study of New System Design and Implementation. *Journal of Personnel Evaluation in Education*, 13(4), 339-359.
- Thurston, P. W., and L. McNall. 2010. Justice perceptions of performance appraisal practices. *Journal of Managerial Psychology*, 25(3-4), 201-228.
- Timperly, H. S., and V.M.J. Robinson. 1997. The problem of policy implementation: the case of performance appraisal. *School Leadership and Management*, 17, 333-345.
- Troman, G., and P. Woods. 2000. Careers under stress: teacher adaptations at a time of intensive reform. *Journal of Educational Change*, 1, 253-275.

- Tshannen-Moran, M., A. Woolfolk-Hoy, and W. Hoy. 1998. Teacher efficacy: its meaning and measure. *Review of Educational Research*, 68, 202-248.
- Tuytens, M., and G. Devos. 2008. Educational Policy on Teacher Evaluation: The Influence of School Leadership on Policy Perception of Teachers. Paper presented at the European Conference on Educational Research (Gothenburg, 10 - 12 september 2008).
- Tuytens, M., and G. Devos. 2009. Teachers' perception of the new teacher evaluation policy: A validity study of the policy characteristics scale. *Teaching and Teacher Education*, 25(6), 924-930.
- van den Berg, R. 2002. Teachers' meanings regarding educational practice. *Review of Educational Research*, 72, 577-625.
- Vanhoof, J., and P. Van Petegem. 2007. Matching internal and external evaluation in an era of accountability and school development: lessons from a Flemish perspective. *Studies in Educational Evaluation*, 33(2), 101-119.
- Woods, P., B. Jeffrey, G. Troman, and M. Boyle. 1997. *Restructuring Schools: Reconstructing Teachers: Responding to Change in the Primary School*. Open University Press, Buckingham.
- Youngcourt, S.S., P.I. Leiva, and R.G. Jones. 2007. Perceived purposes of performance appraisal: correlates of individual- and position-focused purposes on attitudinal outcomes. *Human Resource Development Quarterly*, 18(3), 315-343.
- Zembylas, M., and E. Papanastasiou. 2006. Sources of teacher job satisfaction and dissatisfaction in Cyprus. *Compare*, 36(2), 229-247.