# Relationships Between Teacher Characteristics, Interpersonal Teacher Behaviour and Teacher Wellbeing

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## ABSTRACT

The classroom as a microsystem is characterised by many interpersonal relationships. These relationships are perceived differently by the teacher than they are by the students. In our research we examine the relationship between formal teacher characteristics, interpersonal teacher behaviour as perceived by the teacher, and teacher wellbeing. Teacher gender has an influence on how he or she perceives his or her submitting-opposing interpersonal behaviour in the classroom. Male teachers with children can be situated closer to the cooperating pole of the interpersonal teacher behaviour typology. Male teachers without job security, and teachers without job security who have children, perceive themselves more as leaders with helpful/friendly behaviour in comparison with colleagues who do have job security. Further, years of experience have an impact on teacher wellbeing. Also, the wellbeing of teachers with a high score on the dominance-cooperating quadrant of the scale increases, whereas the wellbeing of teachers with a high score on the submission-opposing quadrant decreases.

## INTRODUCTION

Teaching is a very complex activity that is affected by the subject matter, the time available, the character of the teacher, the disposition of the learners, resources, etc. A distinction can be made between the pedagogical, methodological perspective of teaching (which includes the selection and organisation of teaching materials, methods of instruction and assessment), and the interpersonal perspective, which focuses on the interpersonal relationship between teacher and student (Wubbels & Levy, 1993; Tartwijk, Brekelmans & Wubbels, 1998). The teacher needs to feel comfortable in his working place, which is the school, and more specifically the classroom. There are essential interpersonal relationships between the teacher and the students. Different teachers advocate different levels of control over their students. Some teachers prefer a disciplined environment for learning, whereas others want to create a pleasant classroom atmosphere where students feel safe to take risks and be creative. It is expected that teachers' interpersonal relationships and preferences are to a large extent determined by their background characteristics such as gender and experience.

The main goal of our research project is to detect if there is a link between formal teacher characteristics, the interpersonal relationships experienced by the teacher within a classroom, and the way the teacher perceives his own wellbeing. As interpersonal relationships are brought about by affective aspects, which are principal components of emotional states like wellbeing, this study will focus on these relationships.

## **Interpersonal Perspectives on Teaching**

The study examines the classroom environment from an interpersonal perspective on teaching, which concerns creating and maintaining a positive, warm classroom atmosphere conducive to learning (Williams & Burden, 1997). The focus is on the relationship between students and teachers. Teachers have both a direct and an indirect influence on students. As a result they contribute to the learning environment of these students. For example, teaching behaviour, teaching styles and student perception of the learning environment have been studied and found to be related to student learning (Bennet, 1976; Brophy & Good, 1986; Fraser & Walberg, 1991). According to Moos (1979) the relationship between students and teachers is an important dimension of class climate. Moos distinguishes three dimensions of classroom atmosphere. These three dimensions are relationships within the classroom, personal development and goal orientation, and maintenance and changes within the system. From an interpersonal perspective, it is the first dimension that interests us. This dimension represents the nature of personal relationships within the classroom, particularly the support a teacher offers his students. Involvement and affiliation are also classified under this dimension. Based on these three dimensions, Maslowski (2003) describes class climate as "the collective perceptions of students with respect to the mutual relationships within the classroom, the organisation of the lessons and the learning tasks of the students." It is important to mention that the relationship between students and teachers is closely related to the classroom climate.

Within the system theoretical perspective of communication, it is assumed that the behaviours of participants mutually influence each other. The behaviour of the teacher influences that of his students, whereas at the same time the behaviour of the students influences that of the teacher. In the classroom, the effects of this circular communication process can be seen for example in the creation and maintenance of a good classroom climate, and the behaviours that determine the quality of relationships and feelings. The link between teacher behaviour and student behaviour (Wubbels & Levy, 1993) suggests that teachers can benefit directly from knowing how their interpersonal behaviour affects student behaviour. This mutual relationship is therefore an essential topic in this study. The complex character of classroom environment implies that multiple perceptions are necessary to get a comprehensive image of the education process. Because perceptions are the result of an interaction between the person and his environment, they reveal how someone experiences a classroom situation.

Considering the teacher as an actor in the interpersonal relationship, this study focuses on his perception of the situation. Most teachers perceive the classroom environment more positively than their students (Brekelmans, 1989). This may be because teachers complete the questionnaire from a more idealistic perception of the context than students do. Their answers can also be geared more towards the socially desirable or they can underestimate their influence on students. In relation to this, Brekelmans (1989) points out the difference between actual and ideal perceptions. Our study is restricted to actual perception. Teachers describe how they experience the actual educational situation. An additional explanation for the fact that teachers have a more positive perception of the classroom environment than students have, may be caused by differential power relationships. The fact that students' classroom attendance is essentially involuntary can also be an important factor.

## The Teacher's Wellbeing

We are interested in how the teacher experiences teaching and how this affects his wellbeing. In an earlier study, wellbeing is defined as "a positive emotional state that is the result of a harmony between the sum of specific context factors on the one hand and the personal needs and expectations towards the school on the other hand" (Engels, Aelterman, Van Petegem, & Schepens, 2004).

This definition can be broken down into different components. First, it mentions "a positive emotional state." This means incorporating a positive connotation. Compared to other studies we focus on the positive emotional state and not on deficiency, absenteeism, burnout or stress. The vision behind this definition is one of dynamic involvement and positive change and corresponds with a direction in positive psychology. Secondly, the "harmony" between context and person refers to the attempt to create a Person-Environment fit model (Kristof, 1996). Teachers have to be capable of attuning their own needs and expectations to specific context factors and demands of the school. It is important that they "fit" into the school system. The teacher's qualities that allow for the development of authentic human relationships with his students and his capacity to create a democratic and agreeable classroom are important attributes for effective teaching (Muijs & Reynolds, 2005). Entwistle (1987) affirms that "there are emotional and moral, as well as cognitive sources of satisfaction in schooling" (p 21). So the affective domain is an important factor in successful interactions between teachers and students.

## METHODOLOGY

## **Research Design and Questions**

In educational processes macro, meso, and micro levels can be distinguished. This study focuses on the microor classroom level. Nineteen technical and vocational training schools are participating in this research. We have approximately 260 cooperating teachers of which 41 percent are male and 59 percent are female. For each group of students, teachers of mathematics, language, and a practical course have been asked to fill in questionnaires.

In the Flemish secondary education system technical and vocational training streams exist next to general and artistic education streams. Technical education focuses on general subjects as well as technical-theoretical subjects. Vocational training however, teaches students a specific occupation, while they are also taking some general courses. On completion of a technical or vocational training, students can either look for employment or continue their studies in higher education. Within technical and vocational training we deal with hard and soft sectors of instruction. Hard sectors include mechanical subjects, such as electrical, metal, and wood working. Soft sectors include instruction associated with, among others, sales and business, food and care industry, etc.

Technical and vocational training schools are the focus of our research, because of the present educational policy of reappraising this type of school. We want to know how interpersonal relationships are perceived by these teachers, how they are influenced by personal characteristics, and how this relates to the teacher's wellbeing. The two research questions of this study are:

- 1) Which teacher characteristics influence interpersonal teacher behaviour as perceived by the teacher?
- 2) What is the relationship between teacher characteristics and interpersonal teacher behaviour on the one hand and the teacher's wellbeing on the other hand?

## Questionnaires

Different instruments are used to understand the complex dynamics of interpersonal relationships and the wellbeing of the teacher within a classroom. Interpersonal teacher behaviour is measured as perceived by the teacher. Also the information about the teacher's wellbeing is gauged by the teacher himself. Teacher characteristics are taken into account to explain certain findings.

Two questionnaires are used. These are the questionnaire on teacher interaction as designed by Wubbels, Créton, Brekelmans and Hooymayers (1987) and the questionnaire on teacher wellbeing as designed by Aelterman, Engels, Van Petegem and Verhaeghe (2003).

The Questionnaire on Teacher Interaction (QTI) uses the systems approach to communication developed by Watzlawick, Beavin, and Jackson (1967). They assume that in the classroom circular communications develop, which not only consist of certain behaviours but also determine them. The QTI is also based on Leary's study (1957) of interpersonal diagnosis of personality (Wubbels, Créton & Hooymayers, 1992). Leary suggests that interpersonal interaction is controlled by a desire to avoid anxiety while maintaining self-esteem. Successful interactions are repeated and eventually these interaction patterns are sufficiently established to be recognised as a specific style of communication. Dimensions of interpersonal behaviour can be arranged to represent behavioural variation. This model is adapted to instructional settings such as the classroom.

We are using the questionnaire to pinpoint relationships within the classroom environment. This questionnaire is completed by the teacher. The information thus obtained includes perceptions of the behaviour of the teacher towards the students as a class. This makes it possible to measure the perceptions relating to in-class teacher behaviour. The scientific value and usefulness of this questionnaire has been established (Brekelmans, 1989; Wubbels & Levy, 1993).

The questionnaire on teacher wellbeing (Aelterman et al., 2003) is based on a qualitative and quantitative study. In the qualitative part, teachers were asked to mention all possible indicators of their wellbeing at school. This inventory was combined with theoretical models from the literature, which resulted in a pilot version of the questionnaire. Afterward a confirmative factor analysis with the statistical programme LISREL was performed and a more simplified model was derived. The major components or indicators of the latent variable "teacher's wellbeing" concern teacher efficacy, support from the school board, and student orientation. The most important factor is teacher efficacy, which includes the feeling of being successful in his profession and of being appreciated. Teachers feel that they can control the class, that students listen to them, that they have a good relationship with the students, and that they succeed in motivating the students to study independently. The questions asked reflect the importance of this crucial factor. The indicator support from the school board means having an employer who is interested in the teachers at a personal level. Finally, teachers who are student oriented consider dealing with students the most satisfying aspect of their job.

Teachers who also completed the questionnaire on teacher interaction were asked to fill in this questionnaire on their wellbeing.

## Establishing a Relationship Between the Various Components of the Research Questions

Questionnaires are used to measure teacher interpersonal behaviour and teacher wellbeing. In this study we also want to verify the influence of some teacher characteristics on interpersonal behaviour and wellbeing. We are especially interested in four criteria. These are teacher gender, measure of job security, parental status, and years of experience. All too often these variables are indicated as being static by nature. We are convinced that these personal traits can have a considerable influence on the socioemotional and affective aspects of a teacher's professional life, such as interpersonal relationships and wellbeing.

Teacher gender stands out as being important when considering interpersonal relationships within a classroom. We want to establish whether male teachers approach their students in a different way than female teachers. If we were to accept stereotypes, we would be inclined to believe that male teachers tend more toward the dominance pole within the influence dimension, whereas female teachers would tend more toward submissive behaviour. Considering the proximity dimension, we would then also suppose that male teachers tend more toward the opposition pole, whereas female teachers promote greater cooperation amongst students. The latter would be explained by the greater affective involvement or the greater ability of women to identify with their students. The results of our study will show whether these suppositions are valid.

We are also checking the relation between teacher gender and wellbeing in order to establish if there is a gap in wellbeing between male and female teachers. Are both genders equally satisfied with their profession? It is interesting to note that our focus group teaches in the vocational and technical sector of secondary education. To avoid skewed results we have included questionnaire results from both the hard and soft sectors.

Job security is the second teacher characteristic that we have analysed. 63 percent of the teachers in our sample have job security while the remaining group (37 percent) have not. Assuming that teachers without job security strive to obtain a permanent position we expect these teachers to make a special effort to establish positive interpersonal relationships. This would lead to positive evaluations that would help their cause. Control of classroom communication together with student cooperation are usually viewed as ideal. This would suggest that teachers without job security most likely belong within the dominance-cooperation quadrant. It follows then that teachers with job security are more at liberty to move across the various poles, as they can operate without fearing that their job security may be threatened. This may result in a positive link between a teacher's job security and his general wellbeing.

A third characteristic that could possibly influence interpersonal teacher behaviour is parental status. In this study 54 percent of the teachers have children, 46 percent have no children of their own. Teachers who have children build interpersonal relationships with children on two levels, professional (at work) and parental (at home). We assume that teachers who are parents are more likely to operate within the dominance-cooperation quadrant. It is evident, however, that each group of students presents a new and different challenge and that the teacher will have to find a new equilibrium between the poles within each new group.

Because we assume that teachers with children are better equipped to establish positive interpersonal relationships with their students, we expect to find a higher measure of wellbeing amongst this group of teachers. We can then deduce that a parent who is employed as a teacher will find it far easier to rise to the challenge of also being a successful professional.

The final teacher characteristic considered in our analyses is years of experience. The teachers participating in this study have between 1 and 39 years of experience. 17.2 percent of the teachers have less than 3 years experience and almost 15 percent have held their profession for between 10 and 12 years. We consider this relevant because we believe that it is directly related to positive interpersonal teacher behaviour. Teachers with many years of experience will have encountered various scenarios that have forced them to move within the different quadrants of the typology. This enables them to compare and use a variety of experiences to enhance interpersonal relationships. We suppose that experienced teachers are more likely situated within the dominance-cooperation quadrant.

This supposition leads us to suggest that experienced teachers have a better developed sense of professional wellbeing than their less experienced colleagues. Experience leads to a feeling of competence in building positive interpersonal relationships, which in turn results in a higher sense of professional wellbeing. Had we left aside the mediating role of interpersonal behaviour, we would have been inclined to suggest that more experienced teachers have a lower sense of wellbeing as a result of other consequences of long-term experience such as burnout or boredom. Our analyses will need to shed more light on this supposition. Aside from the influence of teacher characteristics as gender, parental status, and job security on interpersonal teacher behaviour and teacher wellbeing, we also suggest a direct link between interpersonal teacher behaviour and teacher wellbeing. Based on our belief that students need structure and leadership from their teachers, we suppose that teachers who have a higher control of class communication and student cooperation will also score higher in professional wellbeing. This supposition is also supported by the fact that teachers who encourage cooperation amongst and with their students will engage their students more actively and positively, thus satisfying their students' desire to feel actively involved in the learning process.

Once an equilibrium is established between the influence and proximity dimensions, positive interpersonal relationships will develop between teacher and students. This will result in positive feelings of wellbeing. The analyses have to demonstrate whether all the assumptions will hold.

### **Data Analysis**

First, we want to find out which teacher characteristics influence the interpersonal teacher behaviour within a classroom. Teacher's gender, job security, and parental status are the independent categorical variables taken into account. Years of experience is defined as the continuous independent variable. All four quadrants of teacher interpersonal behaviour are considered as dependent variables. So, a multivariate analysis of covariance is executed (MANCOVA).

Secondly, we are interested in the relationship between teacher characteristics and interpersonal teacher behaviour (as independent variables), and teacher's wellbeing (as a dependent variable). To measure this we use an analysis of covariance (ANCOVA).

## RESULTS

## Relationships Between Teacher Characteristics and Interpersonal Teacher Behaviour

One of the main topics of analysis is interpersonal teacher behaviour. Four quadrants are distinguished within the typology of interpersonal teacher behaviour. These are the dominance-cooperation, the submission-cooperation, the submission-opposition and the dominance-opposition quadrants. The scores on these quadrants are between 0 and 1. The mean score of each quadrant can be found in Table 1. We will examine differences in interpersonal teacher behaviour and link these differences to teacher characteristics.

A MANCOVA analysis indicates that there is a significant difference between the way teachers of different gender (Wilks' Lambda = .923,  $p = .003^{**}$ ) perceive their submitting-opposing interpersonal behaviour (Table 2). Male teachers mention more dissatisfied and uncertain behaviour than their female colleagues.

Another finding is that there is an interaction effect between gender and parental status (Wilks' Lambda = .947,  $p = .030^{**}$ ). This effect is found for dominant-cooperating and submitting-cooperating teacher behaviour (Table 2). For these two types of interpersonal teacher behaviour we find that male teachers with children score significantly higher. The score for dominant-cooperating interpersonal teacher behaviour is the same for female teachers with children and without children, and approaches the score for male teachers without children (Figure 1). The submitting-cooperating scores for female teachers are also very similar to those of their childless male colleagues (Figure 2).

\*\* significant at .05 level

Descriptive statistics of the four interpersonal teacher behaviour quadrants and teacher wellbeing.						
	N	Minimum	Maximum	Mean	Std. Deviation	
DC	208	.56	.98	.75	.08	
SC	208	.38	.74	.58	.06	
SO	208	.06	.51	.27	.08	
DO	208	.22	.75	.48	.09	
welbteach	271	22	47	35.82	4.17	
Valid N (listwise)	208					

# TABLE 1

# TABLE 2

Teacher charact.	Interp. Teacher behaviour	F	Sig.	
Sexe	DC	2.31	.130	
	SC	1.48	.226	
	SO	6.23	.013	
	DO	1.10	.295	
Parentst	DC	8.42	.004	
	SC	.71	.402	
	SO	.12	.732	
	DO	1.71	.193	
Sexe * parentst	DC	8.02	.005	
	SC	5.26	.023	
	SO	1.91	.169	
	DO	1.61	.206	
Sexe * jobsec	DC	5.71	.018	
	SC	.12	.730	
	SO	.15	.697	
	DO	.40	.530	
Parentst * jobsec	DC	8.82	.003	
	SC	2.22	.138	
	SO	.99	.320	
	DO	.92	.338	

# Effects of teacher characteristics for the four interpersonal teacher behaviour quadrants.

# **FIGURE 1**

# Interaction effect of teacher's gender and parental status on his dominant-cooperating interpersonal behaviour.

0,82

0,80

0,78

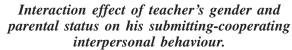
0,76

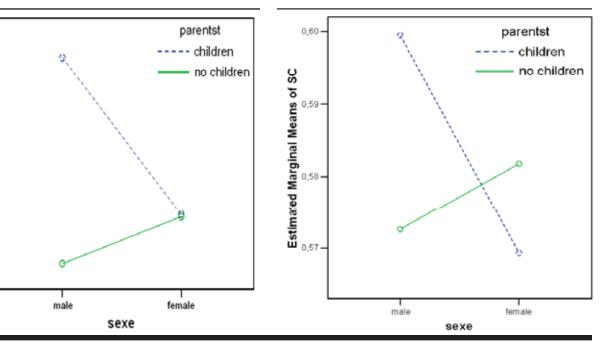
0,74

Estimated Marginal Means of DC



**FIGURE 2** 





Journal of Classroom Interaction Vol. 40, No. 2 2005

An interaction effect between gender and job security (Wilks' Lambda = .943, p =  $.021^{**}$ ) is also found for dominantcooperating interpersonal teacher behaviour (Table 2). Compared to colleagues with job security, male teachers without job security perceive themselves more as a leader with helpful and friendly interpersonal behaviour (Figure 3).

Finally, not only an interaction effect between gender and job security is found, but also between parental status and job security (Wilks' Lambda = .949,  $p = .034^{**}$ ) for the dominance-cooperating quadrant (Table 2). Whether or not a teacher with job security has children does not affect his perception of how dominant-cooperating he is. However, when he has no job security but does have children, he notices more leadership and helpful/friendly interpersonal behaviour than the teacher who has no children (Figure 4).

## The Influence of Teacher Characteristics and Interpersonal Teacher Behaviour on Teacher Wellbeing

The other main topic of analysis, apart from interpersonal teacher behaviour, is teacher wellbeing. Teacher wellbeing is scored on a scale from 7 to 47 with a mean score of 35.82 (Table 1). We will examine the relationship between these two main points of interest. Does the wellbeing of a teacher differ according to his personal characteristics and interpersonal behaviour? Here again, gender, parental status, job security, and years of experience are the teacher characteristics that are taken into account.

Firstly, the results of the ANCOVA analysis show that the wellbeing of a teacher does depend on years of teaching experience (Table 3). There is a positive relationship, which means that teachers with many years of experience have a higher score on wellbeing (Table 4).

Secondly, a significant relationship is found between dominant-cooperating interpersonal teacher behaviour and the wellbeing of a teacher (Table 3). A teacher who perceives himself as leading and helpful/friendly scores higher on wellbeing (Table 4).

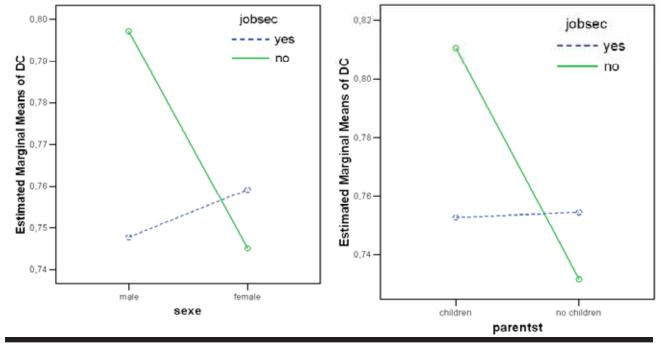
Finally, the degree to which a teacher's interpersonal behaviour is considered as submission-opposition has a significant influence on his wellbeing (Table 3). A negative relationship indicates that teachers with a high score in the submission-opposition quadrant have a low score on wellbeing (Table 4).

# FIGURE 3

Interaction effect of teacher's gender and job security on his dominant-cooperating interpersonal behaviour.



Interaction effect of teacher's parental status and job security on his dominant-cooperating interpersonal behaviour.



Journal of Classroom Interaction Vol. 40, No. 2 2005

#### DISCUSSION

The focal point of this study is the teacher, and more precisely the way in which the teacher's characteristics influence his interpersonal behaviour within a classroom setting. Furthermore, we have looked at the relationship between interpersonal teacher behaviour and the teacher's

## TABLE 3

Relationships between teacher characteristics and interpersonal teacher behaviour on the one hand and the teacher's wellbeing on the other hand Dependent Variable: welbteach

Teacher charact./ Interp. Teacher behaviour	F	Sig.
experience	7.70	.006
DC	21.24	.000
SC	1.60	.208
SO	15.08	.000
DO	.27	.603
sexe	.27	.607
parentst	2.60	.109
Jobsec	.14	.714
sexe * parentst	.16	.691
sexe * jobsec	2.46	.119
parentst * jobsec	1.20	.275
sexe * parentst * jobsec	.67	.414

wellbeing. Results of the analyses indicate that the gender of the teacher influences his perception of his own interpersonal behaviour. Male teachers appear to score higher within the submission-opposition quadrant than do their female counterparts. A reason can be that female teachers are more likely to take into consideration what is expected of them on a social level when it comes to submitting-opposing behaviour. It is self-evident that teachers will not automatically declare that they feel uncertain about or dissatisfied with their own interpersonal classroom behaviour, even when they are. It also seems that some questions regarding the submission-opposition quadrant attempt to measure personal characteristics rather than interpersonal relationships.

Male teachers obtain the higher scores within the submission-opposition quadrant and simultaneously score significantly higher within the dominance-cooperation quadrant when parental status and job security are taken into account. This seeming contradiction could confirm the suggestion of extreme position taking of male teachers. Male teachers with children evaluate themselves significantly higher on leadership qualities and on helpful/friendly interpersonal behaviour than their childless male colleagues and all their female colleagues. The result for women is not just significantly lower overall, parental status appears not to be a factor. When it comes to dominant-cooperative relationships with their students, female teachers consider it irrelevant whether or not they have children of their own.

Male teachers with children do not only score higher in this dominance-cooperating quadrant, but they also score significantly higher in the submission-cooperating quadrant.

## TABLE 4

Regression coefficients between teacher characteristics and interpersonal teacher behaviour on the one hand and the teacher's wellbeing on the other hand Dependent Variable: welbteach

Parameter	В	Std. Error	t	Sig.	95% Confidence Interval	
					Lower Bound	UpperBound
Intercept	23.583	3.63	6.50	.000	16.43	30.74
experien	.076	.028	2.77	.006	.022	.13
DC	15.908	3.45	4.61	.000	9.10	22.72
SC	6.430	5.09	1.26	.208	-3.61	16.47
SO	-13.133	3.38	-3.88	.000	-19.80	-6.46
DO	-1.603	3.08	52	.603	-7.67	4.47

These two observations lead us to the conclusion that male teachers with children will be typically located near the cooperative pole of the proximity dimension, or in the right half of the typology of interpersonal behaviour. It is important to mention the flexibility factor, as it relates to the influence dimension. Male teachers with children not only score high on the dominance pole of the influence dimension, they also achieve a more relaxed communication with their students than their childless male colleagues and their female colleagues. In their interpersonal behaviour, this allows them to score significantly higher on student responsibility, freedom and understanding.

With regard to the teacher's perception of his own dominance-cooperating characteristics, we have found two interaction effects. One interactive effect between teacher gender and job security and another interactive effect between parental status and job security. Male teachers who have no job security score significantly higher in the domains of leadership and helpful/friendly interpersonal behaviour. Moreover, teachers with children who do not have job security score also significantly higher in the dominancecooperation quadrant. These results confirm our supposition that control of classroom communication together with student cooperation are usually viewed as ideal. To obtain a permanent position, teachers without job security make a special effort to establish these ideal, positive interpersonal relationships. Having children could then be important in finding the right balance between a cooperative style of teaching and one where the teacher retains control.

While researching the relationship between teacher characteristics, interpersonal teacher behaviour and teacher wellbeing, we can immediately establish a positive connection between the number of years of teaching experience and wellbeing. Because experienced teachers appear to feel a higher degree of wellbeing than those with less experience, we could conclude that a rather flat teaching career does not necessarily imply a diminishing job satisfaction. This finding, however, is not consistent with the results of another research project (Aelterman et al., 2003).

Secondly, the analyses show that teachers who have a high score in the dominance-cooperation quadrant also have a high score on wellbeing. Teachers who are able to deal with their students in a helpful/friendly manner stand a better chance of feeling good about themselves and their profession.

Our third conclusion is linked to the second in that there is a negative link between dissatisfied and uncertain teacher behaviour and the wellbeing of the teacher. Teacher wellbeing decreases significantly when they have a high score in the submission-opposition quadrant. We advise to interpret these results with a certain caution. It could well be that teachers will give answers that they feel are socially acceptable, especially with regard to their dominant-cooperative attitude. We measure how teachers see their own interpersonal attitudes within the classroom and we can not exclude the possibility that teachers want to present us with an ideal image of their own performance. In general, it seems that competence means that teachers find a balance within the 'influence' and "proximity" dimensions that will lead to a higher degree of wellbeing.

We can conclude that interpersonal teacher behaviour and the wellbeing of the teacher are important aspects of the classroom environment. Teachers have to endeavour to optimise circumstances so that a powerful learning environment will develop. In this sense the valuable information gathered by the QTI has to be used as a basis for reflective practice both by teachers individually and with colleagues. It gives efficacy to notions of reflective practice and action research in the professional development of teachers. It increases the ability to adapt to or "fit" into a variety of situations, which can increase a teacher's wellbeing. Based on this information, teachers might be capable of creating a more desirable classroom environment. An agreeable environment is characterised by positive interpersonal relationships and a place where everyone feels good.

The results of this study underline the need of more extensive research in this domain. It would be interesting to examine variables at different levels. As mentioned earlier, when we take into account student perceptions, it would appear that teachers often over-estimate the positive aspects of their interpersonal behaviour in the classroom. It should therefore be a challenge to continue this investigation by allowing student views into the study's findings. Other student variables, such as their wellbeing and their class results, would permit a more profound examination of classroom processes. This would give research into relationships between different perspectives on interpersonal teacher behaviour, teacher wellbeing, and the cognitive and affective outcomes of the students a new impulse. Linking the findings to information regarding school and educational policy levels could lead to more accurate interpretations.

## REFERENCES

Aelterman, A., Engels, N., Van Petegem, K., & Verhaeghe, J.P. (2003, December). Het welbevinden van de leerkracht is een opgave voor de school.
Beschrijving van een instrument om het welbevinden van leerkrachten te meten. [Teacher's wellbeing is a task of the school. A description of an instrument to measure teacher's wellbeing]. In: *Handboek personeelsbeleid: personeel en organisatie, 4, 25–52.* Wolters Plantyn.

Bennet, S.N. (1976). *Teaching styles and pupil progress*. London: Open Books.

Brekelmans, J.M.G. (1989). *Interpersoonlijk gedrag van docenten in de klas*. [Interpersonal teacher behaviour in the classroom]. Doctoral dissertation, Utrecht, WCC.

Brophy, J.E., & Good, T.L. (1986). Teacher behaviour and student achievement. In M.C. Wittrock (Ed.), *Handbook of research on teaching* (3<sup>rd</sup> ed., pp 328– 275). New York: MacMillan.

Engels, N., Aelterman, A., Van Petegem, K., & Schepens, A. (2004). Factors which influence the well-being of pupils in Flemish secondary schools. *Educational Studies*, 30 (2), 127–143.

Entwistle, N. (1987). Understanding Classroom Learning. London: Hodder & Stoughton.

Fraser, B.J. (1994). Research on classroom and school climate. In D. Gabel (Ed.), *Handbook of research in Science teaching and learning* (pp. 483–541). New York: MacMillan.

Fraser, B.J., & Walberg, H.J. (Eds.). (1991). *Educational* environments: Evaluation, antecedents and consequences. Oxford, England: Pergamon Press.

Kristof, A.L. (1996). Person-Organization fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49 (1), 1–49.

Leary, T. (1957). *An interpersonal diagnosis of personality*. New York: Ronald-Press Company.

Levy, J., Créton, H., & Wubbels, T. (1993). Perceptions of interpersonal teacher behaviour. In T. Wubbels, & J. Levy (Eds.), *Do you know what you look like? Interpersonal relationships in education* (pp. 29– 45). London: The Falmer Press. Maslowski, R. (2003). Klimaat in de klas. [Classroom climate]. *HSO*. B4200-1/28.

Moos, R.H. (1979). *Evaluating educational environments*. San Francisco: Jossey-Bass.

Muijs, D., & Reynolds, D. (2005). *Effective Teaching. Evidence* and practice. London: SAGE Publications Ltd.

Tartwijk, J.V., Brekelmans, M., & Wubbels, T. (1998).
Student perceptions of teacher interpersonal style: The front of the classroom as the teacher's stage. *Teaching and Teacher Education*, 14 (6), 607–617.

Vandenberghe, R. & Huberman, A. (1999). Understanding and preventing teacher burnout. Cambridge University Press.

Watzlawick, P., Beavin, J., & Jackson, D. (1967). *The* pragmatics of human communication. New York: Norton.

Williams, M., & Burden, R. (1997). Psychology for Language Teachers: A Social Constructivist Approach. Cambridge: Cambridge University Press.

Wubbels, T., Créton, H., Brekelmans, J.M.G., & Hooymayers, H.P. (1987). De perceptie van de leraarleerlingrelatie; constructie en kenmerken van een instrument. [The perception of teacher-student relationship; construction and characteristics of an instrument]. *Tijdschrift voor Onderwijsresearch*, *12*, 3–16.

Wubbels, T., Créton, H. A., & Hooymayers, H.P. (1992). Review of research on teacher communication styles with use of the Leary model. *Journal of Classroom Interaction*, 27, 1–12.

Wubbels, T., & Levy, J. (Eds.). (1993). Do you know what you look like? Interpersonal relationships in education. London, England: Falmer Press.