



## School violence and teacher professional disengagement

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**Background.** Most studies of school violence have focused on students. Consequently, precursors and consequences of violence experienced by teachers are less well documented. Previous research indicates that (a) verbal victimization, student misbehaviour and perceived violence at school impair teacher emotional well-being, (b) support from principal and colleagues reduces these difficulties and fosters well-being, (c) well-being impacts on professional involvement. However, it is still not clear how those variables relate to each other.

**Aims.** To test and compare – through structural equation modelling – two models of the relationships between perceived school support, exposure to school violence, subjective well-being and professional disengagement. To test – through multigroup analysis – the buffering effect of school support between school violence and well-being.

**Sample.** Participants in this study were 487 French-speaking teachers (57% female) randomly selected from 24 secondary schools in Belgium.

**Method.** Participants completed a questionnaire on school leadership, relationships with colleagues, verbal victimization, students' misbehaviour, perceived violence, depression, somatization, anxiety and professional disengagement.

**Results.** The results support a model in which perceived school support has a direct effect on exposure to school violence, subjective well-being and professional disengagement, while the effect of school violence on disengagement is totally mediated by well-being. No evidence of a moderating effect of school support was found.

**Conclusions.** The results of this study suggest that the negative emotional impact of some forms of school violence could be an important factor in a teacher's intention to leave, and that school support could be even more important for both teacher emotional well-being and professional disengagement.

School violence is a growing concern in many Western countries and studies about this topic are flourishing (Debarbieux & Blaya, 2001; Smith, Pepler, & Rigby, 2004; Steffgen & Ewen, 2004). These studies have provided valuable and useful knowledge, but have focused almost exclusively on students. Consequently, precursors and consequences of

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violence experienced by teachers are less documented (Lorion, 1998). In most studies, teachers are considered as a source of information about student behaviour or as implementers of prevention programmes, but they are rarely considered as witnesses or victims of school violence (Nicolaidis, Toda, & Smith, 2002).

Yet, many teachers complain about school violence and ask for intervention (Mallet & Paty, 1999; Price & Everett, 1997). Moreover, even if students are clearly more victimized than teachers (Clémence, 2001; Debarbieux, 1996; Galand, Philippot, Petit, Born, & Buidin, 2004), some studies suggest that school violence could have a strong negative impact on teacher well-being (Horenstein & Voyron-Lemaire, 1997; Janosz, Thiébaud, Bouthillier, & Brunet, 2004). Horenstein and Voyron-Lemaire found a high level of post-traumatic stress disorder among French teachers who were victims of physical aggression at school. However their study suffers from some methodological limitations: it was based on a convenience sample, the response rate was very low and there was no control group.

Nevertheless, a study by Janosz and colleagues (2004) indicated that a feeling of insecurity at school was the dimension of school climate which is most predictive of teacher burnout among 6,174 teachers from 143 secondary schools. Another survey among a representative sample of secondary school teachers in the French-speaking part of Belgium showed that physical aggression against teachers is extremely rare (1.6% of victims in a 6-month period, including physical assault, threat with weapons and sexual harassment), but verbal victimization is more widespread and is associated with a higher level of depression (Galand, Philipott, Petit *et al.*, 2004). This study and several others (Debarbieux, Garnier, Montoya, & Tichit, 1999; Mallet & Paty, 1999) also indicate that student misbehaviour is reported and experienced by teachers as a form of violence.

These latter results are consistent with research showing that student misbehaviour is an important factor of teacher stress and burnout (Borg, Riding, & Falzon, 1991). Burnout is usually defined as a state of emotional exhaustion, depersonalization and reduced personal accomplishment, resulting from repeated and long-lasting stress (Maslach & Leiter, 1997). In a study among secondary teachers, Borg and Riding (1991) found that the sources of stress linked to maintaining discipline in the classroom were the most strongly associated with teacher stress. Using structural equation modelling on data from a sample of primary school teachers, Boyle, Borg, Falzon, and Baglioni (1995) showed that student misbehaviour was one of the most powerful predictors of teacher stress. Other studies indicate that perceived inattentiveness and disrespect from students are associated with teacher emotional exhaustion (Friedman, 1995; Hastings & Bham, 2003). In a longitudinal survey, Burke, Greenglass, and Schwarzer (1996) found that student disruptive behaviour is the strongest predictor of burnout among teachers.

From the research reviewed above, it appears that teachers' experience of school violence is mainly composed of a pattern of student misbehaviour, verbal victimization and perceived violence inside the school (Debarbieux *et al.*, 1999; Galand, 2004). This does not imply that teachers' complaints and worries about school violence are misplaced or exaggerated, because those problems do not appear less serious and worrying than physical aggression. As indicated by the studies reviewed above, frequent student misbehaviour, repeated verbal victimization and high perceived violence could hurt teachers and lead to emotional exhaustion. This impaired well-being is a source of concern in itself, but it is also documented as a factor of dissatisfaction, absenteeism, turnover and leaving teaching (Pierce & Molloy, 1990; van Dick & Wagner, 2001). This disengagement could reduce students' opportunities to learn (Kyriacou, 1987),

complicate implementation of reforms or interventions (Useem, Christman, Gold, & Simon, 1997) and worsen the teacher shortage faced by many Western countries (Ingersoll, 2001). Moreover, anxious, depressed or disengaged teachers are less able to sustain the academic engagement of their students. In a study conducted among secondary teachers, Pelletier, Séguin-Lévèsque, and Legault (2002) highlighted that a lack of job involvement on the part of teachers has a negative impact on students' motivation. Similar results were found by Skinner and Belmont (1993) in a longitudinal study. Other studies suggest that insecure teachers may display behaviour that could indeed increase the occurrence of student misbehaviour (Hart, 1987; Hyman & Perone, 1998). Thus, it seems that the kind of events that teachers designate as school violence could have a strong negative impact on teachers, and consequently, on the quality of teaching.

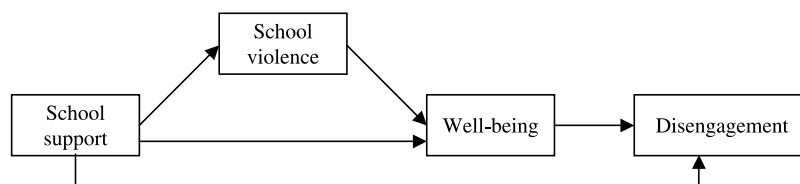
On the other hand, research on teacher stress and burnout indicates that social support from school staff could foster emotional well-being and protect against the deleterious effects of negative events (Leithwood, Menzies, Jantzi, & Leithwood, 1996; van Dick & Wagner, 2001). A study by Parkay, Greenwood, Olejnik, and Proller (1988) shows that the teachers reporting the lowest level of stress are notably those who have good relations with their colleagues and their superiors. Borg and Riding (1991) noted that lack of support, high pressure and low involvement of teachers in the decision process by the school management, increase teacher stress. The results of van Dick and Wagner (2001) highlight the role of principal support in explaining teacher reactions to stress. Russell, Altmaier, and van Velzen (1987) found that teachers receiving support from their management were less vulnerable to burnout, while a study by Greenglass, Burke, and Konarski (1997) highlights the role of co-worker support in the prediction of burnout. More directly linked to school violence, Galand, Philippot, Petit and collaborators (2004) found that the perception of supportive leadership and good relations with colleagues are negatively associated with the risk of victimization among a representative sample of teachers. Other studies also found that supportive leadership and staff cohesion are negatively related to school violence (Debarbieux *et al.*, 1999; Gladden, 2002).

In summary, previous research indicates that (a) verbal victimization, student misbehaviour and perceived violence at school impair teacher emotional well-being, (b) support from colleagues and the principal reduces these difficulties and fosters well-being, (c) well-being impacts on professional involvement. However, it is still not clear how these variables relate to each other. Research on bullying and victimization consistently indicates that social isolation increases the risk of being victimized (Juvonen & Graham, 2001). Other studies indicate that exposure to violence and to student misbehaviour increases teacher stress (Burke *et al.*, 1996; Hastings & Bham, 2003). Research on teacher burnout shows that well-being mediates the impact of stressors on professional disengagement (Pierce & Molloy, 1990; van Dick & Wagner, 2001). From these results, one could hypothesize that perceived school support influences teachers' exposure to school violence but has no direct effect on their subjective well-being and disengagement, and that the effect of school violence on professional disengagement is totally mediated by subjective well-being. This fully mediated model is presented at the top of Figure 1. However, other studies suggest that social support could have a direct protective effect on subjective well-being (Greenglass *et al.*, 1997; Mittlemark, Aaro, Henriksen, Siqveland, & Torsheim, 2004) and directly sustain engagement (Verhoeven, Maes, Kraaij, & Joekes, 2003). On the other hand, we found no evidence that exposure to school violence could have a direct effect on

The fully mediated model



The partially mediated model



**Figure 1.** Two hypothetical models of the relations between school support, school violence, well-being and professional disengagement.

engagement above its impact on well-being (Juvonen, Nishina, & Graham, 2000; van Dick & Wagner, 2001). From these results, one could then postulate that school support directly influences exposure to school violence, subjective well-being and professional disengagement altogether, while the effect of school violence on disengagement is still mediated by subjective well-being. This partially mediated model is presented at the bottom of Figure 1. Hypothesizing different patterns of relation between variables, these two models offer different ways to understand the sources of teacher disengagement and provide different guidelines for intervention. For instance, the first model suggests that reduction of school violence is a key factor in the prevention of teacher disengagement, while the second model rather highlights the role of school support. Structural equation modelling is particularly well suited to compare the fit of various theoretical networks, especially when those are nested as the ones presented in Figure 1 (Byrne, 1998; Jöreskog & Sorbom, 1996). This analytical approach also allows a better control of measurement errors than usual approaches.

Moreover, there is a debate in the stress literature about the possible buffering effect of social support: some theoretical models posit that social support could act as a buffer against the adverse effect of negative life events on well-being, but evidence is mitigated (Sarason & Duck, 2001). A growing number of studies failed to support this stress-buffering effect and called for the development of new conceptual models (Mittlemark *et al.*, 2004; Verhoeven *et al.*, 2003). This debate echoes the results of a few studies in the victimization literature suggesting that social support (friendship) could be both a protective factor against victimization and a moderator in the relation between victimization and stress (Smith, Shu, & Madsen, 2001). In the present study, we hypothesized a protective effect of social support, but we also wanted to test the moderating effect of school support on the relation between exposure to school violence and subjective well-being. Multi-group analysis offers an interesting way to test this effect. This approach allows us to compare the fit of a model where the relation between school violence and well-being is fixed to be equal across different levels of social support, to the fit of a model where this relation is free to vary across levels of social support. If the stress-buffering hypothesis is right, the fit of this second model should be better than the first one and the relation should be lower in the high social support group (van Dick & Wagner, 2001).

To summarize, the first aim of this study is to test and compare – through structural equation modelling – the fit of two nested models of the relationships between perceived school support, exposure to school violence, subjective well-being and professional disengagement among teachers. The second aim of this study is to test – through multi-group analysis – the buffering effect of school support between school violence and well-being.

## Method

### Sample and procedure

The analyses presented in this paper are based on data collected in collaboration with the University of Liège for the Ministry of Secondary Education of the French Community of Belgium (Lecocq *et al.*, 2003). The sampling was based on a two-step procedure. We first selected schools so that each course track was represented proportionately to its importance in the educational system. Twenty-four selected schools agreed to take part in the study. In the second step, 40 teachers were randomly selected by the research team in each school. Each of them received a questionnaire to return anonymously in a ballot box.

Four hundred and eighty-seven questionnaires were returned (representing 50.6% of the contacted teachers). Women represent 57% of the respondents. The majority of the participants were 45 years old or more (50%), 35% were between 30 and 45 and 15% were younger than 30. Of these 40% taught in the comprehensive track only, 34% in the vocational track only and 26% in both course tracks. Thirty-six per cent taught in the first 3 years of secondary education only (7th to 9th grade), 34% in the last 3 years of secondary education only (10th to 12th grade) and 30% at both levels.

### Measures

All scales, except professional disengagement, were used in previous studies and demonstrated good reliability and validity (Galand, Philippot, Buidin, & Lecocq, 2004; Galand, Philippot, Petit *et al.*, 2004). Exploratory factorial analysis supports the *a priori* grouping of the items.

#### *Students' misbehaviour*

Teachers were asked to report the frequency of 11 student misbehaviours during their teaching on a five-point scale ranging from 'never' to 'very often'. Misbehaviours included items such as drinking or eating during lesson, arriving without school equipment, refusing to take off cap, etc. ( $\alpha = .91$ ).

#### *Verbal victimization*

Teachers were asked to report how often they had been verbally victimized at school during the last 6 months, on a five-point scale ranging from 'never' to 'four times or more'. Verbal victimization included rumours, racist insults, sexist insults, jibes and verbal intimidation ( $\alpha = .61$ ). Each victimization was defined as clearly as possible, based on the legal definition whenever possible. Given the relatively low frequency of victimizations, this score was highly skewed. Consequently, a logarithmic transformation was used to produce a more normally distributed score.

*Perceived violence at school*

Teachers were asked to estimate how often 10 violent acts happened in their school on a five-point scale ranging from 'never' to 'very often'. These acts were: insults, vandalism, threat with object or weapon, theft, sexual aggression, racket, blow and wound, fight, use of drug or of alcohol ( $\alpha = .88$ ).

*School leadership*

Nine items assessed teachers' perception of the leadership of their school on a five-point scale from 'totally disagree' to 'totally agree'. Items were related to social and informational support from the principal, involvement of teachers in the decision process and clarity of goals ( $\alpha = .89$ ).

*Relationships with colleagues*

Three items assessed teachers' perception of their relationships with their colleagues on a five-point scale from 'totally disagree' to 'totally agree' ( $\alpha = .70$ ).

*Depression*

The 13 items of the Moos depression scale (Billings & Moos, 1982) were used to assess the frequency of depressive symptoms among participants on a five-point scale ranging from 'never' to 'very often' ( $\alpha = .92$ ).

*Anxiety*

The 20 items of the STAI (Spielberger & Sydeman, 1994) were used to assess the intensity of anxiety symptoms among participants on a four-point scale ( $\alpha = .90$ ).

*Somatization*

Six items assessed the frequency of some physical symptoms, such as headache, difficulty in sleeping and stomach ache, on a four-point scale ( $\alpha = .78$ ).

*Professional disengagement*

Four items assessed the level of teachers' disengagement on a five-point scale ranging from 'totally disagree' to 'totally agree'. These items asked participants if they planned to leave teaching, if they would leave if they had another job offered, if they would like to have another occupation ( $\alpha = .86$ ).

## Results

Means, standard deviations and correlations between the variables are presented in Table 1. All means are relatively low, indicating that most teachers reported a positive professional experience. The majority of teachers reported a high level of engagement, but 14% said that they intended to leave teaching (score higher than 2 on the 0–4 scale). All variables in Table 1 are linked to professional disengagement. Relationships with colleagues and school leadership are negatively associated with disengagement, while students' misbehaviour, perceived violence, verbal victimization, somatization, depression and anxiety are positively associated with disengagement.

On the other hand, gender and teaching years, track or level, are not associated with professional disengagement. Age is the only demographic characteristic of the teachers that is weakly linked to disengagement, older teachers reporting slightly more

**Table 1.** Pearson's correlations between the variables of the study

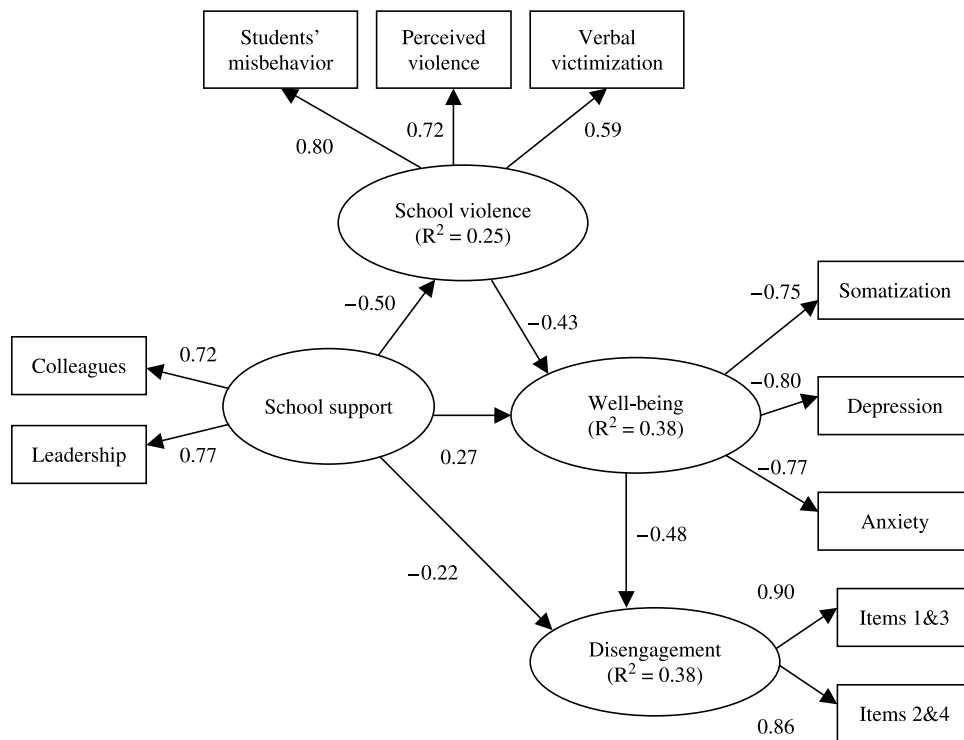
	Range	M	SD	1	2	3	4	5	6	7	8
1. Relations with colleagues	0–4	2.66	0.66	–							
2. School leadership	0–4	2.46	0.75	.55	–						
3. Students' misbehaviour	0–4	1.49	0.74	-.23	-.30	–					
4. Perceived violence	0–4	1.11	1.79	-.30	-.35	.59	–				
5. Verbal victimization	0–1	.22	0.28	-.20	-.22	.47	.40	–			
6. Somatization	0–3	0.84	0.59	-.31	-.28	.38	.35	.28	–		
7. Depression	0–4	1.03	0.67	-.33	-.25	.35	.28	.33	.60	–	
8. Anxiety	0–3	0.98	0.50	-.28	-.25	.34	.24	.31	.56	.80	–
9. Disengagement	0–4	1.11	0.93	-.30	-.33	.26	.20	.19	.37	.44	.50

Note.  $N = 443$ , all coefficients are significant at  $p < .01$ .

disengagement ( $r(479) = .14$ ;  $p < .01$ ). For the other variables, the only noticeable difference is that women reported slightly more anxiety, depression and somatization than men, and that teachers in the vocational track reported slightly more verbal victimization, students' misbehaviour and perceived violence than those in the comprehensive track.

Structural equation modelling was used to test and compare the fit of the two theoretical models presented above with the LISREL 8.3 software (Jöreskog & Sorbom, 1996). Owing to listwise deletion of missing data, the final sample included 443 teachers. Data were checked for outliers. Skewness and kurtosis were between  $-1$  and  $1$  for all scales. The analyses were performed with the maximum likelihood estimation procedure, known to be robust against deviation from normality (Byrne, 1998). Scales scores were used as observed indicators to build latent variables. Relations with colleagues and school leadership were used as indicators of the latent variable 'school support'. Verbal victimization, students' misbehaviour and perceived violence at school were used to assess the latent variable 'school violence'. Measures of depression, anxiety and somatization were used to assess the latent variable 'subjective well-being'. The professional disengagement scale was divided between pair and odd items to build two observed indicators of the latent variable 'disengagement' (Byrne, 1998). Results indicated a good fit of this measurement model ( $\chi^2(29) = 72.65$ ; GFI = .97; RMSEA = .058), but modifications indices suggested adding an error covariance between depression and anxiety. This modification greatly improved the fit of the measurement model ( $\chi^2(28) = 58.33$ ).

Next, the two structural models were tested. Results indicated that both models provided an acceptable fit to the observed data and all paths were significant in both models. However comparison of the fit indexes shows that the partially mediated model ( $\chi^2(29) = 59.96$ ; GFI = .97; RMSEA = .049; ECVI = 0.25) fitted the data better than the fully mediated model ( $\chi^2(31) = 85.64$ ; GFI = .96; RMSEA = .063; ECVI = 0.30). Reduction in chi-square value from the fully mediated model to the partially mediated model was significant ( $\Delta\chi^2(2) = 25.68$ ;  $p < .01$ ). The effect of perceived school support on subjective well-being thus appeared to be only partially mediated by exposure to school violence, and school support also appeared to have an effect on disengagement above its effect on exposure to violence and subjective well-being. The complete diagram of this best-fitting model is presented in Figure 2. This model covers 38% of variance in professional disengagement.



**Figure 2.** Standardized path diagram for the final model (error covariance between depression and anxiety = .18).

To test whether school support buffers the effect of exposure to school violence on well-being, participants were divided into three groups based on their school support factorial score. Those with a score one standard deviation above the mean were classified in the high support group, those with a score one standard deviation below the mean were classified in the low support group, with the remaining participants classified in the middle support group. Multi-group analyses were then used to test the invariance of the relationship between the latent variables ‘school violence’ and ‘subjective well-being’ among these three groups of teachers. Results indicated that relaxing equality constraint on either error variances, factor loadings or structural coefficients did not produce any improvement in fit indexes. These results showed that the relationship between exposure to school violence and well-being was invariant across levels of school support and did not support the buffering hypothesis.

Also, as professional disengagement was correlated with age and as subjective well-being mediated most of the other effects and varied with gender, we wanted to check whether the partially mediated model tested above was invariant across age and gender. First, the sample was divided in two equal groups based on age (less vs. more than 45) and a multigroup analysis was performed on the model presented in Figure 2. Results showed that this model is invariant with age. In other words, relaxing equality constraint on either error variances, factor loadings or structural coefficients did not improve the fit of the model. Next, a multi-group analysis for men and women was also performed. Results of this analysis indicated that error variances and factor loading varied with



gender, but structural coefficients did not. In other words, the relations between latent variables were equal among men and women even if the composition of these variables differed slightly with gender.

Finally, a reverse model, in which low subjective well-being induces a lower perception of school support and increases the attention and exposure to violence, these two factors leading to disengagement, was tested and found to provide a relatively poor fit to the data ( $\chi^2(30) = 116.32$ ; GFI = .95; RMSEA = .081).

## Discussion

The aim of this study was to understand more thoroughly the relationships between perceived school support, exposure to school violence, subjective well-being and professional disengagement among secondary school teachers. Structural equation modelling was used to compare two conceptual models of these relationships. Results show that (a) the construct of school violence, including student misbehaviour, perceived violence at school and verbal victimization, is strongly related to teacher report of anxious, depressive and somatic symptoms, (b) supportive colleagues and leadership are negatively associated with exposure to school violence and have a direct effect both on well-being and on professional disengagement, (c) emotional well-being has a large effect on disengagement and mediates totally the effect of school violence. Multi-group analyses do not provide any evidence of a moderating effect of school support on the relation between school violence and well-being.

Teacher exposure to school violence and its consequences do not appear to be much affected by socio-demographic characteristics, but much more by perceived school context. More precisely, results suggest that school support plays a key role in the risk of exposure to school violence. As was found for students (Pellegrini, Bartini, & Brooks, 1999), isolated individuals are more at risk. Moreover, supportive principals and colleagues sustain emotional well-being and professional engagement, even when exposure to school violence is controlled, but do not seem to moderate the impact of exposure to violence. In fact, the total effect of school support on well-being (direct + indirect = .49) is stronger than the direct effect of school violence. These results give credit to programmes that consider fostering team work, participative decision process and principal training, as important dimensions of school violence prevention (Elliot, Hamburg, & Williams, 1998; Gottfredson, 2001). Nevertheless, the measures of school support used in the present study were rather broad, so it would be interesting in further studies to identify more specific dimensions of school support in order to see which ones are more predictive.

Students are the first victims of school violence and its deleterious consequences (Clémence, 2001; Galand, Philippot, Petit *et al.*, 2004), but results of the present study show that some forms of violence also affect teachers and could impair their capacity to help the most exposed students (Lorion, 1998). However, there is a paradox: the risk of physical victimization against teachers that is presented as a major threat by the media and the common wisdom about school violence (Debarbieux, 2002; Mallet & Paty, 1999) is, in fact, extremely low, while other kinds of minor, repetitive behaviours, which are much less publicized, are much more frequent and have strong negative effects on teachers and teaching. Given the congruence of the present results with research on factors of teacher stress and burnout, one could wonder if what many teachers designate as school violence is not a new name for an old problem. Without careful clarification of what one is talking

about, misunderstanding and fear about school violence could become a scarecrow masking real difficulties faced by many teachers and leading to misleading solutions (Hyman & Perone, 1998; Noguera, 1995). Our results show the importance of taking into account the psychological consequences of facts and not only *a priori* definitions of what is school violence. In European countries, research evidence indicates that school violence problems are more related to classroom management, rules negotiation, effective instructional practices, and communication, coordination and cohesion among professionals, than to physical aggression and delinquency (Debarbieux & Blaya, 2001; Galand, 2004). It is not to say that there are no problems related to antisocial or delinquent behaviour at school, but it is not obvious that they are the most frequent, widespread and pressing problems that most teachers and schools have to deal with. Tough interventions exclusively focused on preventing or tackling those behaviours – by disturbing learning and diffusing an ethos of fear and mistrust – risk worsening the difficulties pointed out as part of school violence in this study (Morrison, Furlong, & Morrison, 1994; Noguera, 1995).

Results of this study could also have implications for the teacher shortage faced by several Western countries. Most attempts to overcome teacher shortage try to increase the number of people who engage in teaching. However a growing body of evidence indicates that the roots of the problem rely on teacher leaving as much as – if not more – in teacher shortage (Ingersoll, 2001; Patterson, Roehrig, & Luft, 2003; Vandenberghe, 2000). Results of the present study suggest that the negative emotional impact of some forms of school violence could be an important factor in teacher intention to leave, and that school support could be even more important for both emotional well-being and professional disengagement. Building a positive school social climate may thus be a promising way to prevent teacher leaving. Obviously, teacher emotional well-being is not affected exclusively by work-related factors. Nevertheless, the results of this study indicate that a large proportion of the variance in well-being (38%) is associated with such factors. Certainly, emotional well-being colours the perception of the work environment, but the present results do not support a model in which the direction of the effect goes completely from well-being to perceived school environment. It should be noted, however, that the correlational nature of our data does not allow any demonstration of causality.

The low predictive power of socio-demographic characteristics is consistent with previous results (Maslach & Leiter, 1997). Studies on factors of teacher stress and burnout repeatedly found null or small relation with age, gender, number of years of teaching, level of teaching, etc. (Pierce & Molloy, 1990; van Dick & Wagner, 2001). The results of the present study replicate these results in a French-speaking population and go a step further in showing that age or gender does not moderate the relation between the variables. Nevertheless, some studies indicate that some working conditions, such as the number of students to teach or the workload, predict teacher stress (Boyle *et al.*, 1995). It would be interesting in future research to look at the effect of such variables on the relations highlighted in this study.

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