



# TEACHERS AS VICTIMS OF SCHOOL VIOLENCE – THE INFLUENCE OF STRAIN AND SCHOOL CULTURE

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## ABSTRACT:

Many research findings about violence involving students against students can be found in the literature, but only a few studies have tested the frequency and causes of violence against schoolteachers. The present explorative study investigates the role of strain and school culture for the prediction of the victimisation of teachers. A representative sample of 399 Luxembourg secondary school teachers between the ages of 24 and 63 returned questionnaires concerning violence at school. The data relating to the frequency of violence showed that pupils' violence directed against teachers seems to be more or less comparable between Luxembourg and German schools. Regression analyses indicated that victimisation of teachers could be predicted by class oriented strain, time pressure and quality of school environment. Implications for research and suggestions for school organisation are discussed.

**KEY WORDS:** violence, victimisation, teacher, strain, school culture

## INTRODUCTION

Schools are increasingly becoming the focus of violence that affect students and teachers at all academic levels. Whereas teachers may be perpetrators, they certainly also can be victims of school violence (Holtappels, Heitmeyer, Melzer & Tillmann, 1999; Steffgen & Ewen, 2004), a point which has been very poorly dealt with in the literature (Jeffrey & Sun, 2006).

Our study aimed to establish and/or strengthen the links between research on school violence and on workplace aggression. Although converging findings on the impact of a wide range of social, environmental (organisational) and individual factors of the victim (Elias, 1986) have been taken into account, this study mainly focuses on two sources of victimisation: organisational factors and victim precipitation.

## RESEARCH ON THE VICTIMISATION OF TEACHERS

### SCHOOL VIOLENCE RESEARCH

Data on the prevalence of the victimisation of teachers are available, collected from students as well as from teachers (Fuchs, Lamnek & Luedtke, 1996; Jeffrey & Sun, 2006). Many studies assert that in Germany there is a rise in verbal aggression with only a low rate of physical violence against schoolteachers (Schwind, Roitsch & Gielen, 1999; Fuchs et al., 1996). Schubarth, Darge, Mühl and Ackermann (1999) illuminate differences between schools in East (the former German Democratic Republic) and West Germany. They report higher prevalence rates for verbal violence in Saxony (East) as compared to Hesse (West).

There is some information about the effects of chronic or pervasive exposure to school violence. Exposed teachers suffer from negative developmental outcomes, decreases in academic achievement, less supportive interpersonal relationships, and withdrawal, as well as negative social behaviour, coping mechanisms and social functioning (Shakoor & Chalmers, 1991). The degree of violence against teachers and its consequences have even led to the identification of a “battered teacher syndrome”, characterised by a combination of stress reactions including anxiety, disturbed sleep, depression, headaches, elevated blood pressure and eating disorders (Goldstein & Conoley, 1997).

Little is known about the characteristics of teachers who are victims of violent acts at school (Furlong, Chung, Bates & Morrison, 1995). Evidence suggests that teachers are not victimised at random; however, detailed information about victim profiles is not available (Morrison, Furlong, & Smith, 1994). The results of the study by Morrison et al. (1994) suggest that victims of school violence are a highly vulnerable group displaying seriously compromised social support networks at school.

In another classical study, Olweus (1978) contrasted the typical “submissive victim” (anxious and insecure students) with a smaller group of “provocative victims”

(their behaviour elicits retaliatory responses from others). Williams, Winfree and Clinton (1989) observed a relation between the school-based victimisation experiences and the level of fear of crime expressed by teachers. These observations were consistent with an emerging perspective in victimisation studies, which views the link between victimisation and fear of crime as part of the more general social climate, including perceptions of one's work environment.

Concerning the role of preconditional factors of violence in school, school culture, and most specifically the school climate, is believed to play a major role. Melzer, Mühl and Ackermann (1998) have presented a comprehensive, integrative and social-ecologically oriented model to explain school violence. They assume that the personal history of experiences has to be considered as explanatory background material for the evolution of violence. In addition to the context of socialisation outside the school (family, peers, media and leisure time), aspects of personality and of school culture are implied in the occurrence of violence. Self-concept, attribution of achievement, fear, sex, age and social background are claimed to constitute relevant aspects of personality. Referring to school culture, educational competence of the teacher (e.g., teacher commitment, student orientation, pejorative or aggressive teacher behaviour, or the labelling of teacher behaviour) and the socio-ecological environment in school (e.g., social network of the class, class cohesion, competition, disintegration, student participation, ecology of the school, quality of the school rooms, time pressure) are regarded as central components. Through a multitude of studies, evidence can be found that supports the relations between school culture variables and violent behaviour (Meier, 1997; Melzer et al., 1998; Melzer, Schubarth & Ehninger, 2004; Tillmann, Holler-Nowitzki, Holtappels, Meier & Popp, 1999). In this context, Steffgen (2004a) confirmed via a multiple hierarchical regression analysis that the interaction of the variable quality of school rooms with supportive teacher commitment is a useful predictor of psychological violence from students.

## WORKPLACE AGGRESSION

Even if every organisation or worker theoretically might become a target of aggressive actions (Collins, Cox & Langan, 1987), some high-risk groups can be identified. Thus, healthcare facilities, industrial, police, penitentiary and educational settings are often mentioned in research findings (Flannery, 1996; Baron & Neumann, 1998; Watson, Williams & Ball, 2001).

The growing empirical literature on workplace violence demonstrates associations with different negative personal and organisational consequences (Ruback & Thompson, 2001). In addition to adverse health consequences (LeBlanc & Kelloway, 2002), effects on the organisational level (e.g., job dissatisfaction, decreased job performance and productivity; Barling, Rogers & Kelloway, 2001; Budd, Arvey & Lawless, 1996) are reported.

Different theories of workplace aggression try to explain specific instances of aggression (e.g., Barling, 1996; Neuman & Baron, 1997; O'Leary-Kelly, Griffin & Glew, 1996). In analogy to these models, the personal and situational antecedents (i.e.,

organisational and job related factors) of workplace aggression should be taken into account (Steffgen, 2004b).

In addition to these antecedents, factors related to the employee, such as the individual's character, have been linked to victimisation. Zapf (1999) found that victims of "mobbing" do not display a high level of social competence. Aquino (2000) suggested that the employee's typical way of responding to conflict situations may influence the risk of being victimised. He showed that obliging and avoiding conflict behaviour is positively related to a higher level of victimisation. The higher individuals scored on the Type A behaviour Pattern, the more frequently they reported being the victim of workplace aggression (Baron, Neuman & Geddes, 1999).

A variety of studies maintain that victims often work in unfavourable work conditions (Hoel & Salin, 2003). In addition to the effects of organisational structure on violence in the workplace—primary characteristics are complexity, formalisation, centralisation and social structure (Tobin, 2001)—the organisational climate determines the incidents of aggression (Sperry, 1998).

The lack of social support from supervisors and colleagues also increases the risk of physical threat in the workplace (Cole, Grubb, Sauter, Swanson & Lawless, 1997). Job-related stress and frustration (Barling, 1996; Fox & Spector, 1999; Warshaw & Messite, 1996) as well as organisational justice (Barling, 1996; Baron et al., 1999; Folger & Baron, 1996; Glomb, 2002) seem to be relevant determinants of workplace aggression.

## PURPOSE OF THE STUDY

The present study is intended to increase our understanding of the antecedents of teacher victimisation. The analysis begins with a description of the victimisation level of teachers in Luxembourg schools. The individual and organisational variables will be related to perceived victimisation, based on prior theory and research findings. The individual variables are different aspects of professional strain, the organisational and job-related variable are different aspects of school culture.

For this purpose regression analyses will be executed allowing for the prediction of victimisation. Hereby, the following questions will be addressed:

- Does professional strain influence the occurrence of teacher victimisation at school?
- Which organisational school culture aspects are related to the occurrence of the victimisation of teachers?

## METHOD

### PARTICIPANTS

Twenty five percent of all Luxembourg secondary school teachers were sampled at random. Eight hundred twenty nine teachers received the research questionnaire, of which 399 forms (anonymous) were returned completed (48.5 % response rate).

Thus, 399 teachers (42.6 % male, 57.4 % female) currently employed in secondary schools in Luxembourg participated in the study. Participants ranged in age from 24 to 63 years ( $M = 42$ ;  $SD = 10.4$ ) and their average teaching experience was 16 years (ranging from 1 to 40 years). The sample consisted of 76% of teachers with an academic degree, 20.2 % of teachers with a professional degree, 3.4% of teachers with another degree and 0.4% without any degree. So, 20.1% of the teachers taught only in general secondary classes, 47.6 % taught only in technical secondary classes, 3.5% taught in special education and 38.8% taught in classes of different educational streams. All in all, 57.9% of the teachers regularly took vocational training. With regard to the parameters measured (age, sex, type of school), the sample was representative for Luxembourg.

## MEASURES

### SCHOOL CULTURE

School culture was assessed using a short version of the questionnaire of school culture by Tillmann et al. (1999). Following factor analysis, the fifty-one items of the questionnaire were subdivided into eight subscales: time pressure (2 items,  $\alpha = .73$ ), quality of school environment (4 items,  $\alpha = .72$ ), student oriented education (13 items,  $\alpha = .86$ ), aggressive teacher behaviour (2 items,  $\alpha = .60$ ), achievement oriented education (5 items,  $\alpha = .66$ ), discipline oriented education (7 items,  $\alpha = .69$ ), teacher commitment (8 items,  $\alpha = .61$ ) and collegial support (10 items,  $\alpha = .86$ ). Each item in the subscales had to be rated on a five-point scale ranging from 1 (agree completely) to 5 (agree not at all).

### PROFESSIONAL STRAIN

Professional strain was assessed using the Strain Questionnaire by van Dick (1999). Thirteen situation-items were rated on a six-point scale from 1 (not at all stressful) to 6 (very stressful). The items do not measure objective strain but rather the subjective feeling of being stressed by demands. Following factor analysis, the items of the questionnaire were divided into two subscales: class oriented strain, stressors related to the students (7 items,  $\alpha = .73$ ) and social strain, stressors related to the social setting (parents, institution) of the school (6 items,  $\alpha = .72$ ).

### VICTIMISATION

The frequency of having been the target of various forms of aggressive behaviour from students was measured with an updated version of the questionnaire on violent behaviour against teachers developed by Tillmann et al. (1999). Seven items of the questionnaire are related to the perceived frequency with which respondents had personally experienced various forms of school violence. Special care was taken to include items relating to the major forms of violence (physical assault, verbal attack). Participants rated the extent to which they had been victims of each type of aggression on five-point scales ranging from almost daily, several times a week,

several times a month, every few months, to never. Scale reliability was acceptable,  $\alpha = .78$ .

## RESULTS

Following an initial analysis focused on the relative frequency with which teachers experience various forms of student aggression, we examined **strain and school culture** as potential causes of victimisation.

### RELATIVE FREQUENCY OF VICTIMISATION OF TEACHER

Data from the nationwide survey show that in Luxembourg 23.9% of the teachers are victims of strong verbal attacks at least several times a year. The level of perceived defamation of teachers is comparably pronounced to be 19.4%. In a study on violence in Bavarian schools, Fuchs et al. (1996) showed that 9.9% of the respondents have been rudely offended by students. In another study, Greszik, Hering and Euler (1995) reported that 29% of teachers have experienced verbal threats by students.

As displayed in Table 1, during the last school year, 9.3% of Luxembourg teachers have been the victims of object theft, 4.5% of object damage and 5.8% of telephone terror. In a study by Greszik et al. (1995), 20% of the respondents in Kassel (Germany) indicated that private objects had been damaged by students. Interestingly, Fuchs et al. (1996) found that 3.9% of teachers' cars have been damaged, and money has been stolen from 2.5%.

Our data suggest that in Luxembourg, 7% of teachers are victims of sexual harassment, whereas only 2% of the respondents will admit to similar experiences in the study by Greszik et al. (1995).

Our national survey also showed that 4% are victims of physical assault, which is in agreement with the findings from Varbelow (2003). In his regional study, 4.2% of the respondents admitted to having been attacked physically. Greszik et al. (1995) even found that 7% of teachers were victims of physical assaults.

In the USA, one out of five school teachers stated that students had verbally abused them, 8% reported that a student had physically abused them and 2% had been physically attacked by students (Furlong et al., 1995).

With respect to sex, female teachers were more often the victims of object damage ( $t = -2,116$ ;  $p < .05$ ), theft ( $t = -3,724$ ;  $p < .001$ ) and physical assault ( $t = -2,673$ ;  $p < .01$ ) than male teachers. There was no significant difference in sexual harassment.

Violent behaviour of students	percent agreeing	M	SD
Strong verbal attacks (e.g. insults)	23,90%	1.30	.63
Defamation	19,40%	1.26	.63
Theft of objects	9,30%	1.11	.39
Sexual harassment	7%	1.10	.40
Telephone terror	5,80%	1.07	.29
Damage of objects	4,50%	1.05	.21
Physical assaults	4%	1.06	.32

**Table 1** Relative frequency of victimisation of teachers (M = mean; range 1 to 5; SD = standard deviation)

With respect to the prevalence of these forms of aggression, only limited data are available. The comparison between the results of the studies is also restricted by different item formulation.

In comparison to the data obtained from teachers, students themselves often report more (physical) violence against teachers (Schwind, Roitsch & Gielen, 1999; Varbelow, 2003).

## RELATION BETWEEN VICTIMISATION, STRAIN AND SCHOOL CULTURE

Pearson product-moment correlations were calculated to assess the relation of the victimisation of teachers with aspects of strain and school culture.

	1	2	3	4	5	6	7	8	9	10
1 time pressure										
2 quality of school environment	-.17									
3 student oriented education	-.12	.22								
4 aggressive teacher behaviour	.06	-.22	-.35							
5 achievement oriented education	.04	.04	-.01	.03						
6 discipline oriented education	.05	-.10	.09	-.02	-.09					
7 teacher commitment	-.27	.36	.53	-.33	-.03	-.02				
8 collegial support	.01	-.08	-.01	-.11	.05	.01	-.02			
9 class oriented strain	.36	-.14	.08	-.01	-.05	.23	-.12	.02		
10 social strain	.29	-.24	-.08	.05	-.04	.07	-.23	.04	.49	
11 victimisation	.18	-.13	.02	.06	.01	-.09	.04	-.01	.17	.14

**Table 2** Correlations between victimisation, strain and school culture variables

The major findings in Table 2 are the relatively low correlations between victimisation and the variables, which range from  $-.13 < r < .18$  (statistically significant association). Time pressure ( $r = .18$ ) and class oriented strain ( $r = .17$ )

show the highest correlations with victimisation. Both correlations are in a positive direction, showing that the higher the perceived pressure of time and class oriented strain, the higher the degree of victimisation of teachers.

### REGRESSION MODELS ESTIMATING THE CONTRIBUTION OF STRAIN AND SCHOOL CULTURE ON THE VICTIMISATION OF TEACHERS

A hierarchical regression analysis for the predictor variables of teacher victimisation was performed (Table 3). Three of the independent variables significantly contributed to the prediction of victimisation: class oriented strain ( $b = .04$ ;  $SE = .02$ ;  $df = 3,390$ ;  $t = 1.97$ ;  $p < .05$ ), time pressure ( $b = -.04$ ;  $SE = .01$ ;  $df = 3,390$ ;  $t = -2.64$ ;  $p < .05$ ) and quality of school environment ( $b = .04$ ;  $SE = .02$ ;  $df = 3,390$ ;  $t = 2.05$ ;  $p < .05$ ).

Predictor	Victimisation	
	b	t
time pressure	-.04	-2.64*
quality of school environment	.04	1.97*
student oriented education	-.01	-.23
aggressive teacher behaviour	-.03	-.02
achievement oriented education	-.00	-.66
discipline oriented education	-.05	-1.05
teacher commitment	-.06	-1.14
collegial support	.01	.25
class oriented strain	.04	2.05*
social strain	.02	.37
total	$R^2 = .06$	$F = 7.76^{**}$

**Table 3:** Predictors of victimisation

No variable referring to the educational competence as a central component of school culture (Melzer et al., 1998) was found to predict teacher victimisation. Also, no sex and age effects could be detected.



## DISCUSSION

Given the nature of the research design employed here, it seems reasonable to conclude that class oriented strain and the socio-ecological school environment have significant predictive value for the victimisation of teachers. However, it has to be emphasised that the variables account for only 5% of the variance in our measures of the incidence of victimisation of teachers.

Our study found that individual and organisational factors are predictive of individual's self-reported victimisation. Therefore individual strain and the institutionally determined quality of school environment have to play an integral part of a comprehensive theory of school violence. Further research should include these individual and organisational factors (see Melzer et al., 1998).

As is the case with most empirical research, several constraints were placed on the design of this study which may affect the interpretation and generalizability of the results. Since the data are cross-sectional, we are not able to make causal inferences regarding predictor-outcome relationships. To enable true causal inferences, longitudinal designs are necessary.

A primary task for researchers is to build more conceptual and empirical bridges between the ongoing research in school violence and workplace aggression.

By identifying the conditions that produce victims, schools may be able to affect teachers' vulnerability to mistreatment. The empirical findings regarding the role of school culture demonstrate that school, as an instance of socialisation, has a share of the responsibility for the violent behaviour of students. Quality of school environment has not only significant predictive value for the occurrence of school violence between students (Steffgen, 2004a), but also for the victimisation of teachers. Thus, the quality of school environment, in particular, can reduce the victimisation of teachers in school (Melzer et al., 1998).

In conclusion, our findings are of theoretical importance because they increase the knowledge concerning the predictors of victimisation. These findings provide a useful starting point for considering the prevention of victimisation. Any attempts to increase the load capacity of teachers (e.g., by stress management training) and to improve the school environment could be considered helpful.

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