Secondary school teachers’ personal and school characteristics, experience of violence, and perceived violence motives

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Abstract
Social cohesion in school is reflected in social discrimination processes and the complementary social roles of teachers, pupils, other staff, and pupils’ relatives. School social cohesion varies in level from high, characterised by pro-social interactions, to low, characterised by antisocial or violent interactions. Antisocial behaviour is usually embedded in specific interaction patterns between different social actors and is based on specific motives or stereotypes that elicit or justify this behaviour. Comprehensive study of these patterns is enabled by Information and Communication Technology (ICT). The aim of this study is to use ICT to investigate social interaction patterns between personal and school characteristics of secondary school teachers and their curricular and disciplinary characteristics and experience of violence, including the motives they perceive when they are the victim, perpetrator, or witness of six types of violence, differentiated according to the complementary roles of pupils, other teachers, other school staff, and pupils’ relatives. Three questionnaires were developed and used in a nationwide Internet-based survey in Dutch secondary schools. This school safety monitor was completed in 2006 by 5148 teachers, 80,770 pupils, 1749 educational support staff, and 629 school managers. Data was checked for reliability, scale homogeneity, and representativeness. Pearson correlation analysis was used to examine the social interaction patterns in teachers’ data. The results reveal violence-specific social behaviour and social mirroring processes between teachers and pupils in particular. Furthermore, teachers who are younger, female, or working in low-attainment educational settings apply more curricular differentiation and collaborate more with pupils on disciplinary matters than their respective counterparts. Teachers who work in low-attainment schools, who
work in cities, who are homosexual/lesbian, or who do not feel most at home in the Netherlands experience more violent behaviour as a victim or witness than their respective counterparts. In particular, teachers attribute the following motives to violence: physical appearance, behaviour, level of school achievement, a handicap, being religious, gender, sexual preference, and ways of dealing with nonconforming behaviour or punishments. Compared to teachers, pupils gave a broad array of motives for every type of violence. The conclusion is that Internet-based data-collection procedures provide a more comprehensive and systematic picture of social discrimination and violence motive patterns in schools than has hitherto been customary.

1 Introduction

1.1 Social cohesion, discrimination, and behaviour in school

Social discrimination and the corresponding behavioural processes between teachers and pupils represent key indicators of social cohesion in schools. ‘Social cohesion’ is defined as the degree of connectivity between individuals, or groups of individuals, in a specific environment (cf. Beauvais & Jenson, 2002; Carbines, Wyatt, & Robb, 2006; Peschar, 2005). Specific feelings, emotions, ideas, activities, perceptions, and practices reflect this connectivity (Bayh, 1975; Dijkstra, Hofstra, Van Oudenhoven, Peschar, & Van der Wal, 2004; International Association for the Evaluation of Educational Achievement, 2007).

Research has produced some empirical evidence for the characteristics of social cohesion at school level. For example, nationwide survey studies involving secondary school pupils, teachers, other staff, and school management carried out in the Netherlands (cf. Mooij, 1992, 1994, 2001; Mooij, Sijbers, & Sperber, 2006) aggregated school level characteristics as reported by school managers and the social and other characteristics of pupils, teachers, and other staff to school level and then integrated them in principal factor analysis. The results revealed the existence of social discrimination and social mirroring processes: in schools where pupils had higher means in problem social behaviour, so did teachers and other staff, and vice versa. Schools with higher levels of problem social behaviour also had lower levels of educational attainment and were smaller in size, that is, they were attended by fewer pupils. The latter finding is consistent (o.c.) and runs contrary to the general belief that, compared to smaller schools, larger schools are socially less cohesive and are characterised by or cause higher levels of problem social behaviour among pupils. It may be that educational attainment level, or the characteristics of the pupils selected for and attending these types of schools, play a more important role in eliciting or stimulating problem social behaviour than school size as such.

To unravel social discrimination and social mirroring processes between such social actors as teachers, pupils, other staff, and pupils’ relatives, more detailed data collection and analysis is necessary (cf. also Buda, 2009). What may be particularly important whenever violent behaviour occurs is the type of violence concerned, and how the violence is experienced: as a victim, an offender, or a witness. Experiencing violence in the role of a victim will be very different from experiencing violence as a perpetrator or a witness. Furthermore, the characteristics of other persons or situations can be used to initiate, motivate, or justify social rejection or violent behaviour (cf. Allport, 1948; Lewin, Lippitt, & White, 1939; Magnusson & Allen, 1983). In a school, some teachers or pupils may for example interact regularly because they speak the same language or have the same skin colour, social or cultural behaviour, or country of origin while excluding other teachers or pupils who do not comply with these specific characteristics or who ignore them or treat them aggressively or
violently (Carbines et al., 2006; Gillison, Standage, & Skevington, 2008). In this respect, teachers should distinguish social modeling and behavioural aspects from the cognitive or achievement behaviour of pupils (Giannopulu, Escolano, Cusin, Citeau, & Dellatolas, 2008; Plant, Baylor, Doerr, & Rosenberg-Kima, 2009; Sutherland & Oswald, 2005).

At the individual level of the teacher or pupil, experiencing a low degree of social cohesion in school may therefore imply social exclusion or segregation and evoke social stereotyping, including antisocial or unsafe behaviour such as bullying and violence (American Psychological Association, 1993; Smith & Sharp, 1994). A situation of this kind may cause teachers and other staff to want to find work in another school or to work outside the education system altogether; pupils, on the other hand, may experience increasing problem social behaviour and drop out of school owing to negative social discrimination and consequent antisocial behaviour (cf. Beirn, Kinsey, & McGinn, 1972; Galand, Lecocq, & Philippot, 2007; Parker & Martin, 2009; Tapola & Niemivirta, 2008). To reduce or prevent negative social discrimination and early school-leaving, detailed data is needed about the relevance of individual characteristics and the social interaction roles and social discrimination processes of the various social actors in school.

Unfortunately, very little comprehensive research has been conducted into the various social roles of teachers and the relevance of various motives in possibly violent relationships between teachers and the other social actors in school. Quantitative research among teachers usually concentrates on one or a few characteristics and on one or a few types of violence (Buda, 2009). This precludes an estimation of the relevance of various individual teacher characteristics across different types of violent behaviour involving different complementary social actors. One of the reasons for this relative lack of detailed information appears to be that, in traditional survey or monitoring research using printed questionnaires, systematic clarification of the various issues requires the involvement of large numbers of persons in rather complicated research. Nowadays, however, Information and Communication Technology (ICT) and the Internet in particular offer opportunities for large-scale digital data-collection procedures that can also be checked for methodological adequacy (cf. Blumenfeld, Fishman, Krajcik, Marx, & Soloway, 2000; Kao & Tsai, 2009; Mooij, 2006). The Internet permits the flexible use of differentiated methods for digital communication, data handling, assessment, and various types of teaching and learning in diverse work situations and communities (Clarke, 2009; Kay, 2009; Kwon & Cifuentes, 2009). Digital assessment can also concentrate on different personal and situation-related characteristics, geared toward assessing motives that may be involved in specific interaction types of social behaviour between different social actors.

1.2 Teachers and pupils as social actors

Social behaviour in and around school is influenced by many different characteristics, e.g. personal, family, and school-related characteristics, as well as pedagogical, social-psychological, and societal characteristics (Collier, 1994; Glover, Gough, Johnson, & Cartwright, 2000). Which specific teacher and pupil characteristics, or which other characteristics in their environment, are related to or responsible for social discrimination and antisocial behaviour in school? Information that may help answer this question can be found in the results of a Dutch Internet-based national survey or ‘monitor’ study that concentrates on the feelings of social safety, problem social behaviour, and violent behaviour in and around secondary schools, including the patterning of social discrimination with respect to six types of violent behaviour and the motives underlying this behaviour (Mooij et al., 2006). Data was collected from pupils, teachers, other school staff, and school managers. Statistical analyses were performed to clarify 12 types of motive patterns in relation to victim, offender, and
witness roles on the one hand and the respective complementary social roles of pupils, teachers, other staff, and pupils’ relatives on the other (Mooij, 2007, in press). With respect to pupils, the outcomes show that:

* pupil characteristics such as a low level of educational attainment, not feeling at home in the Netherlands, being a boy, and being older have the greatest relative importance in violence-related motive patterns; being religious is less relevant, and degree of urbanisation of the region where the school is located is least relevant;
* verbal, material, social, and mild physical violence represent the most significant experiences of violence, relatively speaking; sexual violence is next; and severe physical violence comes in the last place;
* with respect to perception of violence motives, those mentioned the most by pupils are physical appearance, behaviour, school achievement, a handicap, being religious, gender, sexual preference, and ways of dealing with nonconforming behaviour or punishment;
* pupils give a broad array of motives for every type of violence. This implies that they are generally not identifying the actual motive, but rather a complex set of psychologically related arguments that are used to discriminate socially. The interpersonal or intergroup relationships reflect various types of social cohesion, power or violence interaction characteristics between pupils, pupils and teachers, pupils and other staff, and pupils and pupils’ relatives, respectively;
* according to pupils, social interactions between pupils and teachers generally play the biggest role in eliciting violence-related motives, followed by relationships between pupils and pupils’ relatives. Relationships between teachers themselves, and between pupils and other school staff, are least relevant.

1.3 Research questions

The present study focuses on the key results for the secondary school teachers who participate in the Internet-based national monitor study on school safety, referred to in the above section. The first research question looks at teachers’ social perception and mirroring processes as they relate to the initiation or justification of violent behaviour involving different social actors in and around school. Most important in this enquiry is how these processes relate to pupils’ experience of violence (see above section). Information about the relative incidence of the various types of violence and how teachers and pupils experience that violence as a victim, offender, or witness can help clarify mutual social perception and social mirroring processes related to the initiation or justification of antisocial and violent behaviour in and around school. If teachers and pupils agree in their mutual social perception, other intervention procedures or activities designed to reduce or prevent violent behaviour will be required than when teachers and pupils’ social perception and mirroring processes differ. To provide more information on teachers’ and pupils’ experience of social discrimination and violence, the first research question is: do teachers and pupils agree with respect to the incidence to which they experience the differing types of violent behaviour as a victim, an offender, or a witness?

It is also possible to examine social behaviour data on secondary school teachers in order to reveal the relationship patterns between, on the one hand, their personal and school characteristics and, on the other, their social problem or violent behaviour and the motives underlying this behaviour. The second research question asks for the characteristics of these patterns. The answer to this question requires analysis and specification of the relationship patterns between teacher characteristics and perceived motives in being a victim, perpetrator, or witness of different types of violence, differentiated into the complementary social roles of pupils, other teachers, other school staff, and pupils’ relatives, respectively.
2 Main variables

2.1 Personal and school characteristics of teachers

Research indicates that both genetic and environmental factors influence the development and concrete manifestations of a person’s social behaviour (Loeber, Slot, Van der Laan, & Hoeve, 2008; Moffitt, 1993). From a very young age onward, an individual’s characteristics (e.g. age and gender) and environmental characteristics (socio-economic family status, cultural, educational, and demographic features) co-vary with the development of either pro-social behaviour or socially problematic and antisocial behaviour (Loeber et al., 2008; Pellegrini, Bartini, & Brooks, 1999; Van Lier & Koot, 2008). Adolescents generally exhibit more antisocial behaviour than persons at other ages, for example, while boys behave more violently than girls (Arbeitsgruppe Schulforschung, 1980; Fekkes, 2005). With respect to the sanctioning behaviour of secondary school teachers, Salvano-Pardieu, Fontaine, Bouazzaoui, and Florer (2009) present evidence that teachers’ age, gender, and teaching level are relevant in how they judge pupil misbehaviour. Teachers and pupils at low-attainment schools display more antisocial or aggressive behaviour (Loeber & Farrington, 2001; Mooij, 1994, 2001; National Education Association, 1994). The teacher characteristics age, gender, and teaching level will therefore be included to reveal relationships associated with violence experienced in and around school.

A teacher’s sexual preference may also be relevant. Heterosexuality is the norm in specific cultural and, in particular, religious settings, whereas homosexuality or lesbianism and bi-sexuality is against the norm and may therefore be confronted with specific problem or violent behaviour (Mooij, 2007). One characteristic that seems to play a specific role at schools attended by persons from various ethnic minority or immigrant backgrounds is whether or not a teacher feels at home in the institution or the wider environment. School studies by Carbines et al. (2006) and Gillison et al. (2008) clarify that this feeling also reflects the degree of social cohesion in a specific institution, region, or country. Their research reveals that not feeling at home may be related to different types of antisocial or violent behaviour, among pupils in particular. These researchers furthermore illustrate the relevance of being religious in schools. Religious persons may behave more socially than non-religious persons and help or support other persons; however, being religious also appears to be related to more dogmatic and antisocial behaviour. Another relevant factor can be the degree of urbanisation of the region in which the school is situated. Studies by the American Psychological Association (1993), Beirn et al. (1972) and Mooij (2001) demonstrate that, compared to working in rural areas, teachers who work in schools located in a city experience more violent behaviour.

2.2 Curricular, disciplinary, and violence characteristics and motives

In line with research on educational differentiation effects, it can be expected that differentiating lessons according to pupils’ actual learning potential and needs will support their feelings of connectivity to school and will reduce the occurrence of antisocial behaviour, which is conducive to social cohesion in school (Chen, 2006; Collier, 1994). Teachers can differentiate the curriculum, for example by giving pupils different lesson tasks according to their actual learning level, language level, learning speed, and learning questions. Furthermore, involving pupils in disciplinary or social behaviour monitoring processes may support the development of the pupils’ pro-social behaviour and promote the degree of social
cohesion in school (cf. Alschuler, 1980; Mooij, 1999a, 1999b; Olweus, 1991, 1993). Both expectations, however, assume that educational or pedagogical procedures have a stronger influence than existing social or cultural discrimination and the corresponding behavioural processes in schools.

Another set of variables concerns violent behaviour and violence motives. Violent behaviour can be divided into different types, for example verbal, material, social, mild physical, severe physical, and sexual violence. A teacher can experience one or more different types of violence, in varying frequencies, and with respect to different complementary social actors (pupils, other teachers, other school staff, or pupils’ relatives). Moreover, the place/places where an incident/incidents happened, the assumed underlying motives, whether incidents have been reported and, if so, to whom, and how effective reporting has been are all relevant in describing and analysing social interaction patterns at school. The use of ICT made it possible to include all these specifications in the national monitor study on secondary school safety.

3 Method

3.1 Procedure

In 2005, the Dutch Ministry of Education, Culture, and Science asked a research institute to develop a monitor study producing empirically controlled data about social safety in secondary education, including secondary education for pupils with special educational needs. At that time, the total number of school locations was 1642. These schools and their boards received letters from the Ministry and the research institute explaining the goal of the monitor study and the overall procedure with respect to data collection and feedback of results. Each location was asked to nominate a ‘location monitor manager’ to facilitate data collection. It was explained that communication between the school location and the research institute would take place via the Internet. The location monitor manager was asked to organise data collection within the school location. He or she was able to create and distribute log-in codes for classes of pupils, teachers, other staff, and the school management via a specific website and a confidential log-in procedure.

Three separate questionnaires were developed for school management, staff, and pupils, respectively. In December 2005, digital pilot versions were tested at some secondary school locations for all levels of attainment. The questionnaires for teachers, other staff, and pupils were nearly identical. A total of ten classes of pupils, their teachers, two members of the administration, two hall-porters, a member of the school management, and a supervisory committee were involved in the pilot investigation. The teachers were advised to first complete the questionnaire themselves, either at school or at home, and then to coach their class of pupils during the completion process. This sequencing was meant to assist teachers in coaching a class of pupils who were completing the questionnaire. As log-in codes were distributed by the location monitor manager, the respondents remained anonymous. The pilot results led to minor adjustments to the questionnaire regarding the number and nature of variables included, the wording used, the layout, and the distribution of variables in the monitor study.

3.2 Participation

Within the population of 1642 locations for secondary education, 225 location monitor managers signed up to participate. Each monitor manager supervised the data collection
process for his or her own location on the Internet. Pupils, school staff, and the school management began to fill in the Internet-based questionnaires at the end of the first week of January 2006, immediately after the Christmas holidays. If necessary, the location monitor manager created new log-in codes for pupils, staff, or management, or removed codes that were no longer necessary. These organisational activities remained possible throughout the completion period (January and February 2006). Additional information was provided by the research institute’s helpdesk.

A total of 215 (96%) of the 225 sites that had signed up actually participated in the digital data collection. Of these sites, 191 (88.8%) collaborated with all three categories of social informants (pupils; teachers and other staff; school management). The monitor study was completed by 80,770 pupils, 5148 teachers, 1749 educational support staff, and 629 members of the school management. Pupil participation was representative for the level of educational attainment, while school location participation was representative for the degree of urbanisation (Mooij et al., 2006).

3.3 Operationalisation

The first set of teacher variables refers to personal and school characteristics. Personal characteristics are age, gender, sexuality or sexual preference (heterosexual=1; homosexual=2), and whether he or she feels most at home in the Netherlands or in another country. This dichotomous variable was used to indicate the teacher’s feeling of connection to major Dutch values and norms. Another personal variable referred to whether the teacher was religious. Answer categories were: no; baptised but not attending church; and church attending. In a follow-up national survey carried out in 2008, these answer categories were changed to: no; religious but not attending church, mosque, synagogue, or temple; and attending church, mosque, synagogue, or temple. A teacher’s professional level was coded in terms of the attainment level or type of educational programme in which he or she was working the most hours. This variable ranged from low attainment (special secondary education=1) to high attainment (university preparatory=7). Finally, degree of urbanisation was based on a geographical categorisation of schools developed by Vliegen (2005). This system consists of four categories, ranging from big city=1 to rural area=4. This district variable was disaggregated to individual teacher level.

A second set of teacher variables concerns the degree of curricular differentiation practised by the teachers in their lessons. Differentiation was broken down into four items: pupils’ actual learning level, language level (Dutch), learning speed, and learning questions. For each item, teachers stated the percentage of lessons that were differentiated accordingly for their pupils. Four items were included to measure possible involvement of pupils in disciplinary and behaviour monitoring processes. These items were: joint formulation of behaviour rules at the start of each school year, involvement of pupils in monitoring behaviour rules, positive involvement of teachers in monitoring behaviour rules, and daily collaboration of teachers and pupils in monitoring behaviour rules. Teachers scored each item by stating the estimated percentage of lessons executed as described in the item.

Violent behaviour was divided into six types, with 4, 5 or 6 descriptions of concrete behaviour for each type, as given in Table 1. Each description was used as an item for teachers to score from no=0 to always=7.

Table 1 about here

To save the respondents’ time and to reduce repetition in answering, the six types of violence were split into three blocks of two and randomly distributed across participating staff and
pupils. Digital randomisation was achieved by specifications built into the log-in codes for teachers, other staff, and pupils. Digital routings were built into the questionnaires; for example, if a teacher or pupil had experienced a specific type of violence at least once in the period between the 2005 summer holidays and early 2006, he or she was asked to complete the respective block with variables detailing this type of violent incident. In each block, the respondent was asked to specify the frequency of the specific type of violent behaviour, the identity of the complementary social actor (pupils, other teachers, other school staff, or pupils’ relatives), the place where the incident or incidents had happened, the assumed underlying motives (maximum 16), whether the incident or incidents had been reported and, if so, to whom, and how effective reporting had been. The 16 motives explaining why the respondent was a victim of violence were: because of my physical appearance, skin colour, country of origin, behaviour, excellent school achievement, poor school achievement, handicap, because I am religious, because I am not religious, because I am male, because I am female, because I am gay or lesbian, because I am bi-sexual, because I wanted other persons to follow the rules, because I corrected the behaviour of other persons, because other persons disagreed with a punishment given at school. Comparable motives explaining why the respondent was the perpetrator of violence were worded differently so as to describe the appearance, characteristics, or behaviour of other persons.

If a respondent had experienced a specific type of violent behaviour either as a victim, a perpetrator, or a witness within the time period concerned, the scores per item were dichotomized (no=0, once or more=1). The scores per type of violent behaviour were then included in principal factor analysis and Alpha scale analysis. For each type of violence, the factor results indicated the existence of a homogeneous group of items. The relevance of the factors was supported by the Alpha scale results, which are summarised in Table 2. This table presents reliable scales on the various types of violent behaviour, with a relatively low Alpha for severe physical and sexual violence. This result may be related to the large differences between the minimum and maximum scores, relatively the largest difference for these two types of violence. In other words, teachers differ most in their experience of these types of violent behaviour.

Table 2 about here

3.4 Analysis

Univariate data analysis was carried out at individual teacher level by calculating means and standard deviations. Moreover, Pearson correlations were calculated at individual level between the personal and school characteristics on the one hand and, on the other, the variables curricular differentiation, disciplinary behaviour, experience of violence, and motives perceived for being a victim, offender, or witness of the various types of violent behaviour involving pupils, other teachers, other school staff, or pupils’ relatives. The bivariate analysis concerns six types of violence, each specifying combinations of being a victim, perpetrator, or witness with respect to four complementary roles, for seven teacher’s characteristics, and for 16 motives. This analysis results in 6 * 12 = 72 Tables, each with 7 * 16 = 112 correlations. To save space, the sections on bivariate results will present only the numbers of statistically significant motives per type of violence, for each combination of social actors in school, while the number of teachers responding had to be at least 15 to be included. This relatively low number was chosen to include serious but low-frequency incidents of violence in the analysis. The motives referred to by the significant correlations will be discussed in the text. All specific statistical results can be found in Mooij (2007).
4 Results

4.1 Initial descriptive results

The initial descriptive results for teacher characteristics concern the personal and school variables. Age varies between 18 and 70 years (M=43.54; SD=11.19; N=5140), while 55.8 % of the sample are male (N=5138). 97.2 % of the sample claim to be heterosexual; 2.8 % are homosexual or bi-sexual (N=4712). 93.9 % of the teachers say they feel most at home in the Netherlands (N=5124). The percentage of teachers who are not religious is 25.7 %; baptised but not attending church 27.0 %; and church attending 47.3 % (N=4963). A total of 5126 teachers answered the question about professional level (low-attainment or special secondary education 12 %, junior vocational education 41 %, medium - high level of attainment 13 %, university preparatory or highest level 34 %). Degree of urbanisation was divided into four categories, from big city to rural area (11 %, 28 %, 11 %, and 49 % respectively).

Table 3 shows the univariate results for curriculum characteristics that teachers use to differentiate their lessons. According to the teachers, differentiation according to pupils’ learning level is most common (72 %), followed by differentiation according to pupils’ learning speed (65 %), learning questions (57 %), and finally language level (55 %). Teachers say that they themselves support the pro-social behaviour of pupils and act or intervene when necessary (71 %); and they collaborate daily with pupils on monitoring the behaviour rules or disciplinary behaviour (64 %). According to the teachers, the pupils themselves formulate behaviour rules at the start of the school year (33 %). Pupils’ monitoring the behaviour rules gets relatively the lowest score (21 %).

Table 3 about here

The scale results for types of violence were presented in Table 2 above, which shows that verbal violence occurs most frequently, followed by mild physical, social, material, severe physical, and sexual violence. The 16 motives concerning each type of violence were specified according to each combination of victim, offender, or witness involving pupils, other teachers, other school staff, and pupils’ relatives, respectively. The most significant results with respect to the motives are given below.

4.2 Teachers and pupils on the incidence of violence

Table 4 indicates the percentages teachers and pupils experiencing a specific type of violence in a particular role at least once in approximately a six-month period and, between brackets, how the percentages rank per column in terms of incidence. The percentage of teachers claiming to be victims varies from 33 % (verbal violence) to 1 % (severe physical violence); the incidence of verbal violence is relatively lower for pupils (16 %), while sexual violence has the lowest percentage (3 %). Teachers report relatively more incidents in which they are the victims of verbal and mild physical violence than pupils do. Furthermore, teachers report low percentages as perpetrators of violence, while pupils give percentages as offenders that do not differ much from their own victim percentages. Compared to pupils, teachers witness relatively high percentages of all types of violence.

Table 4 about here

The first research question focuses on the degree to which teachers and pupils agree in their ranking of the different types of violence they have experienced as a victim, an offender, or a
witness. Table 4 demonstrates that teachers in the witness role and pupils in the victim, offender, and witness roles agree perfectly in their ranking of the six types of violence. Minor discrepancies in the two groups’ rankings concern the incidence of material violence and sexual violence as a victim (teachers rank these relatively higher) and the incidence of mild physical and severe physical violence as a victim (teachers rank these relatively lower).

4.3 Relationship between teacher, curricular, and disciplinary characteristics

Table 5 contains Pearson correlations between teachers’ personal and school variables on the one hand and the curricular differentiation and disciplinary behaviour items on the other. These results indicate that, from higher to lower statistically significant correlations, teachers working in low-attainment educational settings, younger teachers, religious teachers, and female teachers differentiate between pupils relatively more in their lessons than their respective counterparts. Sexual preference or heterosexuality/homosexuality, feeling/not feeling most at home in the Netherlands, and degree of urbanisation of the school location are not relevant in the relationship between teachers’ characteristics and their curricular differentiation between pupils.

Table 5 about here

The results related to disciplinary behaviour in Table 5 furthermore illustrate the following. Secondary school teachers working in low-attainment educational settings, younger teachers, and female teachers score higher than teachers working at higher educational levels, older teachers, and male teachers on the disciplinary items that express social partnership or collaboration between teachers and pupils.

4.4 Relationship between teacher characteristics, violence, and motives for violence

Introduction

For each type of violence, and for each combination of victim, offender, or witness with respect to the four complementary roles of pupils, other teachers, other school personnel, and pupils’ relatives, Pearson correlations were calculated at individual level between the teachers’ personal and school characteristics and the 16 violence motives perceived by the teachers. Table 6 illustrates the main results. Rows with numbers (N) of teachers equal to or lower than 15 were excluded. The cells in Table 6 present the numbers of motive correlation coefficients found per type and combination of social actors. Only statistically significant correlation coefficients (p < .05, two-sided) have been counted; rows without any significant coefficient were deleted. A + or – sign or +/- sign before a number indicates whether the corresponding variables constituting the correlation coefficients are positive or negative, respectively.

Table 6 about here

Generally, the results in Table 6 reveal violence-type-specific relationships between personal and school characteristics and combinations of social actors with respect to incidents of violence. Teachers who work in low-attainment educational settings or in cities, who are homosexual/lesbian, or who do not feel most at home in the Netherlands experience more violent behaviour as a victim or a witness than their respective counterparts. The next sections
discuss the actual motive correlation results, which are referred to by the numbers in the cells of Table 6. To exclude the risk of capitalisation on chance, rows in Table 6 with only one significant Pearson correlation coefficient are omitted from our discussion.

**Verbal violence**

*Teacher is victim, pupils are offenders*

Compared to younger teachers, older teachers are more likely to attribute verbal violence directed at them by pupils to their excellent work outcomes. Younger teachers, conversely, are more likely than older teachers to believe that they are subjected to verbal violence because they are women or because others disagreed with a punishment. Male teachers feel they are subjected to verbal violence because they are men, and female teachers because they are women. Homosexual/lesbian teachers believe they are subjected to verbal violence because they have a handicap and because of their sexual orientation (homosexual/lesbian or bisexual). Compared to teachers who feel most at home in the Netherlands, teachers who do not do so attribute verbal violence to their appearance, skin colour, and country of origin.

*Teacher is offender, pupils are victims*

More male teachers than female teachers admit to perpetrating violence on pupils because of the pupils’ behaviour. Compared to teachers who feel most at home in the Netherlands, teachers who do not feel at home are violent toward pupils because the pupils did not agree with punishments. Finally, as the degree of urbanisation increases, teachers are more likely to be violent toward pupils because others wanted the teacher to correct his or her own behaviour.

*Teacher is witness, pupils are victims*

Younger teachers are more likely than older teachers to believe they have witnessed verbal violence against pupils owing to the latter’s poor school achievement, because their behaviour was being corrected by others, and because other persons disagreed with a punishment. Homosexual/lesbian or bisexual teachers are more likely than heterosexual teachers to attribute verbal violence against pupils to pupils’ appearance, skin colour, excellent school achievement, not being religious, being male, being female, or being homosexual/lesbian. Compared to teachers who feel most at home in the Netherlands, those who do not are less likely to perceive verbal violence against pupils as being due to pupil behaviour and more likely to attribute it to pupils’ excellent or poor school achievement, not being religious, or being female. Non-religious teachers are more likely than religious ones to perceive verbal violence against pupils as the result of the pupils’ not being religious, being male, being female, or being homosexual/lesbian; they are less likely to think that pupils are subjected to verbal violence because others wanted them to follow the rules. Teachers working in low-attainment schools are more likely than teachers in high-attainment settings to believe that pupils are subjected to verbal violence because of their appearance, skin colour, country of origin, a handicap, disagreement with the rules, because their behaviour was corrected by others, or because others disagreed with a punishment. Verbal violence against pupils owing to excellent school achievement occurs in relatively high-attainment educational settings. Teachers tend to perceive more verbal violence against pupils owing to country of origin, poor school achievement, religion, not being religious, being male, being female, or being bisexual in big cities than in rural areas.

*Teacher is witness, other teachers are victims*
The teachers who believe they have witnessed verbal violence against other teachers are in particular those who do not feel most at home in the Netherlands and those who teach in big cities. They attribute the violence to the same motives as those given when pupils are victims. In addition, older teachers are more likely to attribute verbal violence to the victim’s behaviour or to his/her being female; younger teachers, on the other hand, are more likely to think other teachers are subjected to verbal violence owing to rules, behaviour being corrected, and disagreement with a punishment.

Teacher is witness, other staff are victims
Teachers who do not feel most at home in the Netherlands are relatively more likely (10 out of 16) to witness motivated verbal violence against other staff members than teachers who do feel at home in the country. The motives they give for such verbal attacks are: skin colour, excellent work outcomes, poor work outcomes, a handicap, religion, not being religious, being male, being female, homosexuality/lesbianism, and bi-sexuality.

Material violence

Teacher is victim, pupils are offenders
There is a correlation among teachers here between not feeling most at home in the Netherlands and incidents of material violence by pupils owing to the teacher’s appearance, his or her skin colour, and because the teacher corrected the behaviour of others.

Teacher is witness, pupils are victims
Homosexual/lesbian or bisexual teachers are more likely to witness material violence against pupils owing to the relevant pupils’ skin colour, their country of origin, their religion, their not being religious, or because they are homosexual or lesbian. Teachers working in low-attainment educational settings are also more likely than those working in high-attainment settings to believe pupils are victims of material violence owing to their handicap, religion, or being female; teachers in high-attainment settings, on the other hand, believe that pupils are victimised owing to their excellent school achievement. Teachers in big cities are more likely to attribute material violence against pupils to poor school achievement, or their handicap, than teachers in rural areas. Older teachers are more likely to witness material violence against pupils owing to the victim’s behaviour; female teachers witness more material violence against pupils owing to a handicap than male teachers.

Teacher is witness, other teachers are victims
Homosexual/lesbian or bisexual teachers are more likely to witness material violence against other teachers owing to the victim’s appearance or poor work outcomes. Teachers working in low-attainment schools are more likely than teachers in high-attainment settings to witness other teachers being victimised owing to a handicap. Teachers working in big cities are more likely than teachers in rural areas to witness material violence against other teachers because they are homosexual/lesbian.

Teacher is witness, other staff are victims
Younger teachers are more likely than older teachers to witness other staff subjected to material violence owing to a handicap. Teachers working in low-attainment schools refer to the same motive more often than teachers working in high-attainment schools. Teachers in rural areas are more likely to attribute material violence to the behaviour of the victims.
Teachers who do not feel most at home in the Netherlands are more likely to attribute material violence against other staff to the latter wanting others to follow the rules.

Social violence

**Teacher is victim, pupils are offenders**
Teachers working in low-attainment schools are more likely than those in high-attainment settings to attribute social violence against themselves to their poor work outcomes, their being non-religious, their being women, or because others disagreed with a punishment; those working in high-attainment schools are more likely to attribute such violence to their own behaviour. The teacher’s homosexuality/lesbianism also plays a role: homosexual/lesbian teachers believe that they experience social violence because of their sexual preference, and because they did not correct other people’s behaviour. Female teachers are more likely than male teachers to feel they are subjected to social violence because of their gender.

**Teacher is victim, other teachers are offenders**
Homosexual/lesbian teachers are subjected to social violence by other teachers because of their homosexuality/lesbianism. Older teachers are victims of social violence because they correct other people’s behaviour; male teachers believe it is because they want others to follow the rules, and because others disagreed with a punishment. The latter motive is also cited more by teachers working in low-attainment schools than those working in high-attainment settings.

**Teacher is victim, other staff are offenders**
This type of violence is experienced by teachers working in low-attainment schools. They attribute it to their being non-religious or to their being female.

**Teacher is witness, pupils are victims**
Teachers working in a low-attainment educational setting are more likely than those working in a high-attainment setting to attribute social violence against pupils to the pupils’ appearance, skin colour, country of origin, a handicap, religion, rules of behaviour, and disagreement with a punishment; conversely, those working in a high-attainment setting are more likely to attribute such social violence to the pupils’ excellent school achievement. Teachers in big cities are more inclined than teachers in rural areas to see a handicap, being male, or following the rules as the motive. Younger teachers tend to attribute social violence against pupils more to appearance and excellent school achievement than older teachers do. Teachers who do not feel most at home in the Netherlands believe that pupils’ excellent school achievement causes them to be the victim of social violence.

**Teacher is witness, other teachers are victims**
Teachers who do not feel most at home in the Netherlands are more likely than those who do to cite the following motives for social violence against fellow teachers: skin colour, country of origin, excellent work outcomes, religion, or because others wanted the victimised teacher to follow the rules. Teachers who do feel at home in the Netherlands are more likely than other teaching staff to believe that teachers are subjected to social violence because others disagreed with a punishment. Younger teachers believe that religion is a cause of social violence against fellow teachers. Male teachers and teachers in rural areas are more likely than other teaching staff to attribute social violence against other teachers to their behaviour.
Religious teachers are more likely than non-religious teachers to believe that country of origin is a motive for social violence.

*Teacher is witness, other staff are victims*
Younger and homosexual/lesbian teachers are more inclined than other categories of teachers to attribute social violence in this witness/victim combination to the victims’ appearance. Homosexual/lesbian teachers are also more likely than other teachers to identify a handicap as the motive. Teachers working in low-attainment schools are more likely than teachers working in high-attainment schools to cite as motives that others wanted the victims to correct their behaviour or that others disagreed with a punishment.

*Mild physical violence*

*Teacher is victim, pupils are offenders*
Compared to teachers who feel most at home in the Netherlands, teachers who do not do so attribute mild physical violence to their appearance, skin colour, and country of origin. Religious teachers and teachers working in low-attainment schools are more likely than other categories of teachers to claim they are victims of mild physical violence because they have tried to correct the behaviour of others; teachers in high-attainment schools believe that their behaviour is the motive for the violence.

*Teacher is witness, pupils are victims*
In this pattern, it is mainly teachers working in low-attainment schools, as opposed to those working in high-attainment settings, who believe that pupils are subjected to mild physical violence owing to their appearance, skin colour, country of origin, behaviour, poor school achievement, handicap, religion, others wanting them to correct their behaviour, and others disagreeing with a punishment. Female teachers cite the two latter reasons significantly more often than male teachers. In addition, heterosexual teachers are more likely than homosexual/lesbian teachers to attribute the violence to the victims’ behaviour. Teachers in big cities mention a handicap as a motive for mild physical violence more often than teachers working in rural areas.

*Teacher is witness, other teachers are victims*
Teachers who do not feel at home in the Netherlands are more likely than other categories of teaching staff to attribute mild physical violence against other teachers to a handicap. Non-religious teachers are more inclined than religious teachers to believe that teaching staff are subjected to mild physical violence because others wanted them to follow the rules. Teachers working in big cities are more likely than teachers in rural areas to think that the violence is due to others disagreeing with a punishment.

*Severe physical violence*

*Teacher is witness, pupils are victims*
Older teachers are more likely than younger ones to believe that pupils are victims of severe physical violence owing to their country of origin. Homosexual/lesbian teachers are more likely than heterosexual teachers to attribute such violence to the victims’ skin colour, country of origin, being non-religious, being a woman, or because others wanted the victim to follow the rules. Non-religious teachers are more inclined than religious ones to believe that pupils
are subjected to severe physical violence owing to their skin colour or their being non-religious. Teachers working in low-attainment schools witness more severe physical violence against pupils than teachers in high-attainment schools owing to the victim’s skin colour, behaviour, his/her being made to follow the rules, others correcting the victim’s behaviour, and because others disagreed with a punishment. Teachers in big cities are more likely than teachers in rural areas to attribute severe physical violence against pupils to their excellent school achievement or their being female.

**Sexual violence**

*Teacher is victim, pupils are offenders*
Younger teachers are more inclined than older ones to say that they are the victims of sexual violence perpetrated by pupils owing to their appearance or their being a woman; older teachers, on the other hand, are more likely than younger ones to attribute it to their wanting others to follow the rules. Male teachers attribute their being subjected to sexual violence to their own behaviour and to their being male, and female teachers to their appearance and to their being female. Homosexual/lesbian teachers are more likely than heterosexual teachers to attribute sexual violence against them to their religion, or to their being homosexual/lesbian or bisexual. Teachers working in low-attainment schools are more likely than their counterparts in high-attainment schools to attribute sexual violence against themselves to their wanting others to follow the rules or to others disagreeing with a punishment.

*Teacher is witness, pupils are victims*
Older teachers tend to witness sexual violence against pupils more often where the motive is the pupil’s country of origin; younger teachers do so in cases in which the motive is the pupil’s bisexuality. Homosexual/lesbian teachers are more likely than heterosexual teachers to see the pupils’ homosexuality/lesbianism as the motive behind sexual violence. Teachers working in low-attainment schools are more inclined than their counterparts in high-attainment schools to think that sexual violence is perpetrated on pupils owing to a handicap or to their being female. Teachers in big cities believe they see more sexual violence against pupils for being male or female than teachers in rural areas.

*Teacher is witness, other teachers are victims*
Older teachers claim more often than younger teachers that they have witnessed teachers perpetrating sexual violence against other teachers owing to the latter’s behaviour. More female teachers than male teachers say they see this type of violence because others wanted the victimised teacher to follow the rules or because others wanted the victim to correct his/her behaviour. Homosexual/lesbian teachers are more likely than heterosexual teachers to believe the motive behind such attacks are that others wanted to victims to follow the rules. Teachers working in low-attainment schools also refer to correcting victim’s behaviour as a motive more often than teachers working in high-attainment schools. Compared to teachers working in rural areas, those working in big cities witness sexual violence against teachers more often owing to the victim's behaviour.

**Answers to the research questions**

The first research question concentrates on the agreement between teachers and pupils with respect to type of violence experienced as a victim, an offender, or a witness. Table 4 shows
that perfect agreement exists between teachers as witnesses and pupils as victims, offenders, and witnesses. Minor differences in ranking are found between teachers and pupils with respect to being a victim of material violence and sexual violence (teachers rank these relatively higher than pupils) and of mild physical and severe physical violence (teachers rank these relatively lower than pupils). The range for teachers as victim varies from 33 % (verbal violence) to 1 % (severe physical violence); the incidence of verbal violence for pupils is relatively lower (16 %), while sexual violence has relatively the lowest percentage (3 %). Compared to pupils, teachers witness relatively high percentages of all types of violence. These outcomes generally support the ‘social mirroring’ interpretation of problem social behaviour between teachers and pupils. Furthermore, teachers perceive more violence than pupils, which may be related to their professional role. Teachers are of course responsible for the cognitive achievements of pupils, but when social interaction or disciplinary processes become too disruptive, cognitive achievements are also at risk. This line of reasoning suggests that follow-up research comparing teacher and pupil data could concentrate on the relevance of the social divergences between teachers and pupils in the same school. What school characteristics are related to the possible gaps between teachers’ and pupils’ perception of violence, and how can such information help bridge such gaps in order to promote social interaction patterns between teachers and pupils and support the cognitive achievements of pupils?

The second research question involves the analysis and specification of relationship patterns between teachers’ personal and school characteristics and the motives attributed to being a victim, perpetrator, or witness of different types of violence, in relation to the complementary social roles of pupils, other teachers, other school staff, and pupils’ relatives. The significant correlation results at individual teacher level illustrate the following main results (see Table 6). Violence-specific social mirroring processes appear to occur in particular between teachers and pupils, followed by comparable processes between teachers and other teachers. The relevance of pupils’ relatives in violence-related relationships with teachers is negligible, a result that deviates from the corresponding results with pupils (Mooij, 2007). Teachers who are younger, female, or working in a low-attainment educational setting tend to apply more curricular differentiation and collaborate more with pupils in disciplinary behaviour than the other categories of teacher. Teachers who work in a low-attainment educational setting, in cities, are homosexual/lesbian, or do not feel most at home in the Netherlands experience more violent behaviour as a victim or witness than their respective counterparts. In addition, listed from highest to lowest incidence, teachers working in low-attainment educational settings, homosexual/lesbian teachers, teachers living in cities, teachers who do not feel most at home in the Netherlands, and teachers who are female, younger, or not religious experience relatively more violence than their respective counterparts. Listed from most to least frequently cited, significant motives were given for verbal, material, social and mild physical violence; then sexual violence; and finally severe physical violence. With respect to the 16 motives specified, all of them were relevant in the combinations of social actors investigated. Physical appearance, behaviour, work outcomes, a handicap, being religious, gender, homosexuality, and disciplinary behaviour or punishment were seen as relatively the most important motives in social discrimination and violence patterns between the social actors in and around school. However, very specific motives were given for different types of violence.

5 Discussion
The present study had a dual focus. On the one hand, it concentrated on the Internet-based assessment of social cohesion and related interaction patterns between personal and school characteristics of secondary school teachers; on the other, it focused on teachers’ experience of violence and the motives they perceive for someone’s being a victim, perpetrator, or witness of six types of violence, differentiated into complementary roles.

**Internet-based assessment of social cohesion**

The nationwide monitor study in secondary education was carried out in 2006 and completed by 215 school locations of a population of 1642 locations. This quantitative result has to be evaluated from different perspectives. In 2006, Internet-based assessment was new in Dutch secondary schools and, in addition, schools did not know at beforehand that a digital monitor study for school safety was coming. Traditionally, surveys with paper questionnaires were organised by community organisations for Youth Health. Notwithstanding this, 80,770 pupils, 5148 teachers, 1749 educational support staff, and 629 members of the school management participated in the digital monitor study. In addition, statistical checks revealed that pupil participation was representative for level of educational attainment, while participation of school locations was representative for degree of urbanisation (Mooij et al., 2006). Given these characteristics, quantitative participation to the digital monitor can be called successful.

Furthermore, the resulting empirical evidence, based on both teacher and pupil data, demonstrates that the main conceptual specifications and concrete operationalisations of the variables were reliably implemented in a coherent system for digital assessment (cf. Tables 1 – 2). The correlation analyses of Table 6 in particular clarify the relevance of 16 motives or characteristics that these teachers use in their role as a victim, offender, or witness of six different types of violent behaviour. In this respect the monitor study provides a more complete and systematic picture of secondary school teachers’ social discrimination patterns and violence motives than has hitherto been the case. The fact that comparable results are obtained using data provided by other school staff on the teachers and pupils also supports this conclusion (cf. Mooij, 2007). Given the reliability, internal validity, and plausibility of the analysis results based on the mutual data provided by these different groups of respondents, it seems safe to conclude that the digital method used resulted in response numbers, variable specifications, and data collection procedures that would have been difficult or impossible to achieve with printed questionnaires.

In addition, the digital features helped provide participating school locations with information about their scores on the three questionnaires. The IT features made it possible to provide Internet-based feedback to individual school locations about their own results among pupils, teachers, educational support staff, and school management. The feedback covered specific school location parameters and respective national benchmarks, including indicators differentiating results into educational attainment level and school year. All these feedback indicators were expected to assist participating school locations in interpreting and evaluating their own school safety in various respects and in defining the school policy steps needed to improve social safety. This research approach is identical to the one proposed by Astor, Guerra, and Van Acker (2010) who suggest to apply large-scale evidence-based programs at the district, regional, and state levels to improve school safety in the USA. However, the follow-up of the Dutch feedback procedure taught that the researchers had to assist schools and teachers in interpreting, evaluating, policy making, and planning of concrete actions to improve school safety. Realisation of evidence-based improvement of school safety does not occur automatically in schools.
Concerning teachers’ experience of violence and the respective motives in secondary school, the present study reveals violence motive relationships with respect to being younger, female, and working in low-attainment schools (see Table 6). These empirical results seem supported by Salvano-Pardieu et al.’s (2009) research on teachers’ sanctioning behaviour. More generally, the biographical, professional, and social-psychological relationships in Tables 5 and 6 reflect various types of social cohesion or power and violence oriented interaction characteristics between teachers and pupils in particular, and between teachers and other teachers, and teachers and other staff. Qualitative examples of such school interaction processes are presented in a report entitled Encouraging tolerance and social cohesion through school education, written for the Australian Department of Education, Science and Training (Carbies et al., 2006). The many relationships in Tables 5 and 6 underline the need for a systematic theoretical examination of how perception of motives functions psychologically to discriminate socially between specific persons, or groups of persons, in socially patterned and institutionally or culturally established ways (see also Collier, 1994; National Education Association, 1994). Concerning school safety, however, Mayer and Furlong (2010) discuss the state of the art and conclude that the present lack of common conceptualisations and empirical standards produces conflicting findings and hinders the advancement of theory, policy, and practice. To overcome these problems, these authors call for a 10-year strategic plan to improve school safety (cf. also Mooij, 2005).

Yet the lack of a general conceptual framework to guide measurement and compare or evaluate research outcomes does not block the possible explanation of one paradox of the present study. When compared to high-attainment schools, low-attainment settings offer a relatively higher level of curricular differentiation and more teacher-pupil partnership in disciplinary processes (Table 5), but also more violent behaviour in all the categories (Table 6). The interpretation of this paradox may be that, given the social and cognitive characteristics of the pupils in low-attainment schools, teachers in these educational settings differentiate more or offer more support than those in high-attainment schools; yet the very same pupil characteristics mean that these teachers achieve relatively less with them than teachers in high-attainment schools achieve with their pupils. In other words: although teachers in low-attainment schools may ‘work harder’ than other teachers, they achieve less with their pupils because such pupils have specific social and cognitive characteristics that mark them out for specific educational programmes.

The psychological, pedagogical, and educational processes that seem to play a role in special needs education and other low-attainment programmes, and among teachers and pupils who do not feel most at home in the Netherlands, therefore seem to require closer examination than is usually the case in order to determine how to improve pro-social support for pupils, teachers, and parents in these settings (cf. also Cowie, Hutson, Oztug, & Myers, 2008). Various suggestions have already been made as to how the pedagogical and educational situation of such pupils at risk and their teachers can be systematically improved (Hermanns, Öry, & Schrijvers, 2005; Mooij & Smeets, 2009; Sherman, Gottfredson, MacKenzie, Eck, Reuter, & Bushway, 1998; US Department of Health, Education and Welfare, 1973). The present results suggest that it is important to learn to deal constructively with a wide variety of differences between people, both at home and at school. That is made clear by the analysis results for the behavioural motives related to appearance, skin colour, country of origin, behaviour, school achievement, gender, homosexuality, religion, punishment, and so on. One possible approach is to always interpret and deal with such differences in a positive light. Even very young children can be taught and experience for themselves that every social partner merits social sensitivity and social integration (Kauffman,
2005; Sutherland & Oswald, 2005; Vollebergh, Van Dorsselaer, Monshouwer, Verdurmen, Van der Ende, & Ter Bogt, 2006). All of the stakeholders in and around a school location should be able to perceive and help develop or redevelop a sense of social integration and associated social cohesion, starting with every pupil’s first day at school (Howard & Jenkins, 1970; Kirschner, 1997).

Furthermore, in view of what the monitor study has revealed concerning teacher characteristics, special support should also be given to women, homosexuals/lesbians, persons who do not feel most at home in the Netherlands, religious persons, and persons working in a relatively low-attainment educational environment. Probably the best way to help teachers and pupils function more pro-socially and effectively is to combine pedagogical, social, curricular, and disciplinary differentiation measures that offer teachers specific support and to integrate pupils’ social responsibilities where possible (Alschuler, 1980; Förrer, Kenter, & Veenman, 2000; Lodewijks, 2008; Mooij, 1999a, 1999b; Salmivalli, Kaukiainen, & Voeten, 2005; Stevens, De Bourdeaudhuij, & Van Oost, 2000). At the same time, advancing and strengthening socially competent behaviour can preclude antisocial behaviour or an increase in such behaviour (Sørlie, Hagen, & Ogden, 2008). Teachers and educational support staff, but also parents, must work together and be given earlier and more effective support than is usually the case (see also Bogenschneider, 2002; Chapman & Harris, 2004; Georgiou, 2008). Important are proposals and procedures to develop, implement, and empirically check early practices to promote pro-social discrimination processes and corresponding social behaviour, and to prevent or reduce the incidence of antisocial behaviour, truancy, and the possession and use of weapons and drugs in particular. Chen (2006) and Lim and Deutsch (1996) have provided research overviews to demonstrate that specific social measures may lead to effective improvement of social safety between teachers and pupils.

Acknowledgements
I would like to thank the secondary school teachers and other respondents who participated in the study. The national school safety monitor for secondary education was developed in 2005 at the request of the Dutch Ministry of Education, Culture, and Science. Secondary analyses of the 2006 data were permitted by the Ministry and carried out on behalf of the Netherlands Equal Treatment Commission in 2007. This Commission is an independent organisation that promotes and monitors compliance with Dutch equal treatment legislation. I am grateful to the Ministry and the Commission for making possible the research and analyses presented here.

References


<table>
<thead>
<tr>
<th>Types of violence</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal</td>
<td>Calling names, bothering someone on purpose, talking in an extra loud voice, making a lot of noise on purpose</td>
</tr>
<tr>
<td>Material</td>
<td>Scratching or damaging something, spray-painting or dirtying something, hiding or mislaying something, destroying things, stealing</td>
</tr>
<tr>
<td>Social</td>
<td>Ignoring, excluding, threatening, intimidating, blackmailing, spreading false rumours</td>
</tr>
<tr>
<td>Mild physical</td>
<td>Striking or hurting someone on purpose, pushing or kicking someone on purpose, tripping someone on purpose, punching someone on purpose, hitting</td>
</tr>
<tr>
<td>Severe physical</td>
<td>Fighting with someone, beating or roughing someone up, threatening someone with a weapon, using a weapon</td>
</tr>
<tr>
<td>Sexual</td>
<td>Making sexual comments, sexual gestures, feeling someone up, sexually molesting someone, rape</td>
</tr>
</tbody>
</table>
Table 2 – Types of violent behaviour, numbers of teachers responding, and scale results

<table>
<thead>
<tr>
<th>Types of violence</th>
<th>N</th>
<th>N items</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Alpha</th>
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</thead>
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<tr>
<td>Verbal</td>
<td>1705</td>
<td>4</td>
<td>.85</td>
<td>.77</td>
<td>.89</td>
<td>.83</td>
</tr>
<tr>
<td>Material</td>
<td>1633</td>
<td>5</td>
<td>.56</td>
<td>.40</td>
<td>.68</td>
<td>.81</td>
</tr>
<tr>
<td>Social</td>
<td>1612</td>
<td>6</td>
<td>.50</td>
<td>.21</td>
<td>.63</td>
<td>.84</td>
</tr>
<tr>
<td>Mild physical</td>
<td>1638</td>
<td>5</td>
<td>.59</td>
<td>.51</td>
<td>.66</td>
<td>.93</td>
</tr>
<tr>
<td>Severe physical</td>
<td>1676</td>
<td>4</td>
<td>.20</td>
<td>.01</td>
<td>.55</td>
<td>.53</td>
</tr>
<tr>
<td>Sexual</td>
<td>1621</td>
<td>5</td>
<td>.20</td>
<td>.01</td>
<td>.48</td>
<td>.65</td>
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### Table 3 – Univariate results for curriculum characteristics and disciplinary procedures

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean %</th>
<th>SD</th>
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</thead>
<tbody>
<tr>
<td><strong>Curriculum characteristics: teachers base lessons on pupil differences in</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>learning process level</td>
<td>4797</td>
<td>71.83</td>
<td>23.80</td>
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<td>55.24</td>
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<td><strong>Disciplinary behaviour</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>pupils formulate behaviour rules at the start of the school year</td>
<td>4798</td>
<td>33.41</td>
<td>34.04</td>
</tr>
<tr>
<td>as far as possible, pupils themselves monitor compliance with the behaviour rules and sanctions for non-compliance</td>
<td>4798</td>
<td>20.77</td>
<td>26.17</td>
</tr>
<tr>
<td>teachers support pro-social behaviour and act or intervene when necessary</td>
<td>4799</td>
<td>70.74</td>
<td>20.64</td>
</tr>
<tr>
<td>teachers and pupils collaborate daily on monitoring behaviour rules</td>
<td>4799</td>
<td>63.69</td>
<td>26.58</td>
</tr>
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</table>
Table 4 – Rankings of experience of types of violence by secondary school teachers and pupils*

<table>
<thead>
<tr>
<th>Types of violence</th>
<th>% of teachers (ranking per column)</th>
<th>% of pupils (ranking per column)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Victim (ranking per column)</td>
<td>Offender (ranking per column)</td>
</tr>
<tr>
<td>Verbal</td>
<td>33 (1)</td>
<td>3 (1)</td>
</tr>
<tr>
<td>Material</td>
<td>11 (2-3)</td>
<td>0 (3-6)</td>
</tr>
<tr>
<td>Social</td>
<td>11 (2-3)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Mild physical</td>
<td>3 (4-5)</td>
<td>0 (3-6)</td>
</tr>
<tr>
<td>Severe physical</td>
<td>1 (6)</td>
<td>0 (3-6)</td>
</tr>
<tr>
<td>Sexual</td>
<td>3 (4-5)</td>
<td>0 (3-6)</td>
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</table>

* Number of pupils participating varies between 25,763 and 26,727.
Table 5 – Pearson correlations between teacher characteristics, curriculum characteristics, and disciplinary procedures

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Age (18 - 70)</th>
<th>Gender (male=1; fem=2)</th>
<th>Sexuality (heter=1; homo=2)</th>
<th>I feel most at home Nthlds (yes-no)</th>
<th>I am religious (no-baptised-yes)</th>
<th>I work in educat. attainm (low-high)</th>
<th>Degree of urbanis. city=1; rural=4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum characteristics: teachers base lessons on pupil differences in learning process level</td>
<td>-.12** .04** .02 -.01 .09** -.17** .03*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>language level</td>
<td>-.10** .05** .01 -.01 .04** -.26** .01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>learning speed</td>
<td>-.13** .05** .02 .01 .08** -.26** .02</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>learning questions</td>
<td>-.12** .05** .02 .02 .07** -.22** .01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Disciplinary behaviour: pupils formulate behaviour rules at the start of the school year</td>
<td>-.16** .11** .02 .03* .02 -.14** .02</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>as far as possible, pupils themselves monitor compliance with the behaviour rules and sanctions for non-compliance</td>
<td>-.16** .07** .02 .01 .04* -.12** .00</td>
<td></td>
<td></td>
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<tr>
<td>teachers support pro-social behaviour and act or intervene when necessary</td>
<td>-.12** .06** .00 -.01 .03* -.16** .04**</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>teachers and pupils collaborate daily on monitoring behaviour rules</td>
<td>-.16** .10** .01 -.04** .03 -.17** .03</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
Table 6 – Numbers of significant Pearson correlations between teacher characteristics and specified motives with respect to six different types of violence and different social actors*

<table>
<thead>
<tr>
<th></th>
<th>age (18 - 70)</th>
<th>gender (male=1; fem=2)</th>
<th>sexuality (heter=1; homo=2)</th>
<th>I feel most at home Nthlds (yes-no)</th>
<th>I am religious (no-baptised-yes)</th>
<th>I work in educ. attainm (low-high)</th>
<th>degree of urbanis. city=1; rural=4</th>
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<tbody>
<tr>
<td>Verbal violence (n=1705)</td>
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</tbody>
</table>

* Rows with numbers of teachers equal to or lower than 15, and rows without any significant correlation coefficient, were excluded from this Table.