Monitoring Bullying Behaviours may not enhance Principal’s Awareness of the Prevalence

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Monitoring bullying behaviours is the key aspect of a successful anti-bullying intervention. Questionnaires among pupils and Principals of the same schools were utilised to measure the agreement between pupil-reported frequency and Principals’ estimations of the prevalence of frequent bullying in the same schools, and to identify monitoring methods associated with the best agreement. The correlation between the pupil-reported frequency and the Principal's estimate of the prevalence was weak. Two-thirds of the Principals estimated the prevalence of frequent bullying in their schools to be four percentage points lower than the prevalence based on pupil reports. Questionnaires that were developed and administered by the schools themselves and unspecified monitoring methods were associated with the best agreement between pupil-reports and Principal-estimates of the prevalence of frequent bullying. There is a clear need to better communicate the nationally collected data back to schools. It seems that despite monitoring efforts, school Principals were not aware of the prevalence of frequent bullying as perceived by their pupils. Awareness of the problem may require more than just available evidence.

Key words: management, school improvement, bullying
Introduction

Bullying affects almost all school-aged children even if they are not victimised themselves (Stassen Berger 2007). Several definitions of bullying have been suggested. All of them share the following features: bullying is a systematic abuse of power; it is repetitive, negative behaviour that can manifest in many ways. The existing literature identifies, for example, physical, verbal and relational bullying, even if they are sometimes named differently (Ladd and Kochenderfer-Ladd 2002; Stassen Berger 2007). Involvement in bullying, either as a victim or as the perpetrator, may have detrimental short- and long-term consequences on educational attainment and psychosocial adjustment (Schreier et al. 2009; Rivers et al. 2009; Kaltiala-Heino and Rimpelä 1999; Brown and Taylor 2008). Also, witnessing bullying may leave adolescents at risk of negative psychological consequences (Rivers et al. 2009; Janosz et al. 2008). Awareness of the serious nature of the phenomenon was raised in the 1980s, and efforts since have aimed at intervention.

Significant efforts are invested into anti-bullying interventions at schools in many western countries, yet even the best results seem to be modest (Merrell et al. 2008; Bauer, Lozano and Rivara 2007). In Finland the legislation requires that school safety plans are incorporated into the curriculum in every school, with the inclusion of measures directed at addressing violence, bullying and harassment. It is required that schools both implement the school safety plans and monitor them. (Basic Education Act 477/2003). The school Principal, as the highest civil servant of the school, is responsible for the execution of these plans, including the measures to tackle bullying. Nevertheless, bullying is a highly prevalent problem in Finnish schools, as in schools elsewhere (Stassen Berger 2007; Elgar et al. 2009; Salmivalli and Isaacs 2005).

The use of monitoring and subsequent data in order to change practice is a new trend in school leadership. In Finland, as in many other countries, the role of the Principal is changing rapidly and
seems to be becoming increasingly complex. Hence, there is a strong need to develop strategic thinking and strategic approaches to school leadership (Townsend 2011). Student learning is the main function of the school and must thus be the ultimate aim of school improvement, too (Creemers, Kyriakides and Panayiotis 2013). Continuous analysis and interpretation of monitoring data is an essential part of a successful anti-bullying intervention process. Data may be used to create awareness, identify target groups for intervention, compare the level of bullying behaviour with other schools, and to assess the efficacy of anti-bullying strategies (Astor, Benbenishty and Meyer 2004). The motivation to collect and use monitoring data on bullying may be enhanced by informing the principal and school personnel of the effect of bullying behaviours on the learning environment and ultimately on learning effectiveness.

It has been suggested that the perceptions of teachers about bullying are directly associated with efforts made to stop bullying behaviour (Dake et al. 2004; Dake et al. 2003; Ellis and Shute 2007; Kochenderfer-Ladd and Pelletier 2008). Teachers may react differently to incidents they witness themselves than to incidents reported to them by pupils (Bradshaw, Sawyer and O’Brennan 2007). Yet, pupils report that teachers do not consistently intervene with bullying even when they witness it with their own eyes (Bradshaw, Sawyer, and O’Brennan 2007; Erling and Hwang 2004). Physical bullying is recognised by teachers and pupils of all ages (Vaillancourt et al. 2008; Smith and Hoy 2004; Smith et al. 2002), but adults may have difficulties in differentiating physical bullying from self-defence and good-natured rough-housing (Stassen Berger 2007). Verbal bullying is more common than physical bullying among adolescents (Scheithauer et al. 2006; Delfabbro et al. 2006) but verbal and relational bullying may be less apparent to teachers than physical bullying, and may easily go unnoticed (Bradshaw, Sawyer and O’Brennan 2007). Awareness of the significance of the
problem is a key factor in the success of prevention programmes. There are, however, few studies that look at the awareness of school staff of the prevalence of bullying in their schools.

The aim of the present study was to explore the association between pupil-reported bullying and estimations by the Principal about the prevalence of frequent bullying at their school.

The research questions were as follows:
1. What is the proportion of 8th grade pupils reporting being frequently bullied in Finnish comprehensive schools?
2. What is the proportion of pupils being frequently bullied as estimated by the school Principal (or the corresponding official)?
3. What kind of agreement is there between the Principals’ estimates and pupils reports of bullying prevalence?
4. What kind of monitoring is associated with the most accurate estimate of frequent bullying?

Material and Methods

The data were obtained from two independent studies: the Benchmarking Welfare and Health Promotion in the Comprehensive School System questionnaire (BWHS questionnaire), which focused on the management of pupil health and welfare in comprehensive schools, and the Finnish School Health Promotion Study (SHP study), focusing on adolescent health and health behaviours.

The nationwide Finnish School Health Promotion Study, carried out every second year since 1995, is a classroom survey concerning health, health-related behaviour and lifestyle among Finnish adolescents. All secondary schools in the study area (approximately half of Finland) are contacted.
If a school decides to participate, the questionnaires are distributed to the pupils during a school lesson supervised by a teacher, who ensures that the pupils complete the questionnaire undisturbed by their peers, but without interfering with answering. The anonymous questionnaires are returned in closed envelopes. Although schools made the decision to co-operate in distributing the questionnaires, participation by individual pupils was voluntary. The Ethical Committee of Tampere University Hospital approved the study. The data of the present study comprise responses of pupils from the 8th and the 9th grade (14–16 year-olds) of 361 secondary schools participating in the 2006 SHP study (response rate 80%).

The Benchmarking Welfare and Health Promotion within the Comprehensive School System study was conducted in 2007. All comprehensive schools were invited to complete a questionnaire concerning the health promotion capacity and activity in their schools. The questionnaire was designed by a board consisting of experts in different areas of school health and welfare as well as representatives of schools. The study was carried out by the Finnish National Board of Education and the National Research and Development Centre for Welfare and Health (STAKES, now the National Institute for Health and Welfare). The school Principal was instructed to respond to the questions with the help of the management group and also the personnel responsible for the welfare of pupils. Despite differences in the actual titles of the leading officers, all respondents from the BWHS survey are hereafter referred to as Principals. Of the Principals, 75% responded to the questionnaire. Responding to the questionnaire was not associated with the size of the school. Principals of schools in bigger towns responded to the questionnaire less frequently. The final data consisted of 232 responses from schools that participated in both the SHP questionnaire and the BWHS questionnaire, and had at least 100 pupils in classes 7–9.
Measures

The pupil-reported prevalence of bullying was studied through the SHP data. An introduction specified bullying as follows: "We say a pupil is being bullied when another pupil, or a group of pupils, say or do nasty things to him or her. It is also bullying when a pupil is being teased repeatedly in a way she or he does not like. But it is not bullying when two pupils of about the same strength quarrel or fight." Thereafter the respondents were asked how frequently they had been bullied during the ongoing school term with the response alternatives being: many times a week, about once a week, less frequently and not at all. The responses were dichotomised in order to get a school-level estimate of frequent bullying (percentage of pupils reporting "many times a week" or “about once a week”).

Prevalence of Frequent Bullying estimated by Principals

In the BWHS survey the following description was used for bullying: “Bullying refers to incidents in which one or more children have repeatedly been the target of negative behaviour (for example physical aggression, intimidating, blackmailing, mocking or name-calling, the hiding, breaking of stealing of belongings, cyber-bullying, discrimination or rejection) from one or several peers.” Prevalence of frequent bullying was elicited with the question: “What was the prevalence of frequent bullying (being bullied once a week or more often) during the school term 2005–2006. The response alternatives were: I don't know, none, 1–2%, 3–4%, 5–6%, 7–8%, 9–10%, more than 10% of the pupils have been frequently bullied”.

In the BWHS survey the Principals were asked how the frequency of bullying was monitored with the following alternatives: SHP survey; other pupil surveys; in regular health check-ups; in regular meetings between the teacher, pupil and parents; by compiling statistics of bullying incidents; some
other way. We also asked whether the municipal school management had given the school instructions on monitoring the prevalence of bullying. The municipal management of monitoring was recorded as “yes” if Principals reported that instructions were given.

Statistical analyses

The correlation between the pupil-reported prevalence of bullying and the Principal's estimate of the prevalence was studied with Spearman’s rank correlation coefficient. The association between different methods of monitoring and responding “don't know” for the prevalence of bullying in school was studied with Pearson's $\chi^2$ test. Variance analysis was used to study the association between differences in monitoring methods and differences between the Principal-estimated and pupil-reported prevalence. We calculated the difference between the pupil-reported prevalence and Principal's estimates on frequent bullying. If the pupil-reported estimate fell into the Principal-estimated category (±0.5), the difference was 0. Otherwise we subtracted the upper or lower limit (±0.5) of the Principal-estimated category from the pupil-reported prevalence in order to obtain the difference of the two estimates.

**Results**

*Pupil-reported and Principal-estimated Prevalence of Bullying*

According to pupils’ reports, on average 7% (range 2–20%) of pupils in each school were frequently bullied. Two-thirds of the Principals estimated the prevalence of frequent bullying in their schools to be at least four percentage points lower than the prevalence reported by pupils. One in ten Principals estimated that none of the pupils in their schools were frequently bullied, though pupil-reports of frequent bullying revealed none of the schools to be free of it. Nine per cent of the Principals reported that they did not know the prevalence of bullying. The most common Principal-estimate for the proportion of pupils frequently bullied was 1–2%, while the most common pupil-
The reported prevalence of frequent bullying was 7–8% (see Figure 1). The correlation between the student-reported prevalence and the Principal's estimate of the prevalence was weak (r=0.13, p=0.06).

**Estimate of the principal and the proportion of pupils reporting frequent bullying in Finnish comprehensive schools**

![Graph showing the estimated prevalence of frequent bullying by principals and pupils.](image)

**Associations of the Estimated Prevalence of Frequent Bullying with Types of Monitoring**

Of the Principals, 97% reported using at least one type of monitoring of bullying in their school. Municipal instructions on monitoring were reported by 43% of the Principals. The most common forms of monitoring were; asking the pupils at regular health checks (92%) and at the meetings between the pupil, parent and teacher (91%) that are held once or twice a year. Other forms of monitoring were the SHP survey (84%), other pupil surveys (75%), compiling statistics of bullying incidents (57%), and other means (37%).
Monitoring with “other pupil surveys” (p=0.362), “regular meetings with the teacher and parents” (p=0.680), “other methods” (p=0.228), or municipal management of monitoring (p=0.218) were associated with responding “Don't know” (Table 1). If a school had monitored bullying with SHP or “Compiling statistics of bullying incidents” it was more likely that it gave some estimation of the prevalence of bullying (p=0.006, p=0.004) than responding that the prevalence was not known.

<table>
<thead>
<tr>
<th>Type of monitoring used</th>
<th>Estimate of prevalence of frequent bullying</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Don't know</td>
</tr>
<tr>
<td>- SHP survey</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>- Other pupil surveys</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>- Regular health checks</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>- Regular meetings with teacher and parent</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>yes</td>
</tr>
<tr>
<td>- Compiling statistics of bullying incidents</td>
<td>no</td>
</tr>
<tr>
<td></td>
<td>yes</td>
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<td>- Other methods</td>
<td>no</td>
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<td></td>
<td>yes</td>
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<tr>
<td>Municipal instructions on monitoring</td>
<td>no</td>
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<td></td>
<td>yes</td>
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</table>
When the means of the differences between the pupil-reported and Principal's estimates of the prevalence of frequent bullying were compared according to type of monitoring, few statistically significant differences were observed. Reporting “other methods” and “other pupil surveys” were associated with better agreement between pupil reports and Principal's estimates of the prevalence of bullying. Having received municipal instructions on monitoring was not associated with better agreement between the two (Table 2).

<table>
<thead>
<tr>
<th>Type of monitoring used</th>
<th>Difference between the pupil-report and the principal’s estimate</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>SHP survey</td>
<td>4.12</td>
<td>178</td>
</tr>
<tr>
<td>Other pupil surveys</td>
<td>3.95</td>
<td>157</td>
</tr>
<tr>
<td>Regular health checks</td>
<td>4.28</td>
<td>192</td>
</tr>
<tr>
<td>Regular meetings with teacher and parent</td>
<td>4.23</td>
<td>186</td>
</tr>
<tr>
<td>Compiling statistics of bullying incidents</td>
<td>4.38</td>
<td>124</td>
</tr>
<tr>
<td>Other methods</td>
<td>3.43</td>
<td>67</td>
</tr>
<tr>
<td>Municipal instructions on monitoring</td>
<td>4.18</td>
<td>93</td>
</tr>
</tbody>
</table>
Discussion

The responses of pupils and Principals from 232 schools were compared to measure agreement in the prevalence of frequent bullying (one or more incidents per week). Using pupil-reported bullying as the reference group, the Principals were found to significantly underestimate the proportion of pupils frequently bullied in their schools in spite of reporting that bullying was monitored in their school. It seemed that the most common forms of monitoring (asking at the regular health checks and meetings between student, parents and teacher) did not provide the Principals with valid information concerning the prevalence of bullying in their schools. The only types of monitoring associated with a better agreement between pupil-reports and Principal's estimates of frequent bullying were pupil surveys other than the national SHP survey, and methods not specified (i.e. survey response “other methods”).

There are no previous studies on the association of pupil-reported and Principal-estimated prevalence of bullying in the same schools. A few studies on the agreement between student and teacher ratings have been made (Wienke Totura 2009; Ladd and Kochenderfer-Ladd 2002; Leff et al. 1999), though agreement was found to be low. According to our results 7% of pupils reported being frequently bullied. No school was completely free of frequent bullying. Yet, one in ten Principals estimated that none of the pupils in their schools were frequently bullied. A majority of the Principals estimated the prevalence of frequent bullying in their schools to be at least four percentage points lower than the prevalence based on pupil reports. These figures seem alarming. Media publicity, national surveys, and the efforts of the government to encourage school safety programs may still have failed to make Principals aware of the extent of the problem.
The discrepancy in pupil-perceived and Principal-estimated bullying may to some extent be due to different definitions of bullying as understood by teachers and pupils (Naylor et al. 2006; Menesini, Fonzi and Smith 2002; Pakaslahti and Keltikangas-Järvinen 2000). In the present pupil survey, bullying was defined as repeated negative behaviour towards a peer (saying or doing nasty things, teasing repeatedly in a way she or he does not like). Furthermore, social exclusion was addressed separately. It has been suggested that attaching a description of bullying in surveys decreases reporting of victimisation (Vaillancourt et al. 2008). The description of bullying offered to Principals responding to the survey was slightly different, offering several specific suggestions of behaviour that can be considered bullying. In previous studies teachers have been reported as acknowledging physical forms of bullying more readily than verbal and relational forms, and to consider direct forms of bullying as more serious than the indirect ones (Stassen Berger 2007; Bradshaw, Sawyer, and O'Brennan 2007; Pakaslahti and Keltikangas-Järvinen 2000). The description of bullying offered to Principals in the present study included different forms of verbal bullying, thus helping the respondents to consider this type of bullying. We hypothesised that a more detailed description would have made it easier for the Principals to identify different kinds of behaviour as bullying and would lead to estimates being more accurate. The hypothesis was not confirmed.

Anti-bullying policies are increasingly being considered in schools in many western countries. These will not help to facilitate a change if they are not properly implemented. There may be a vast gap between written policies and their daily integration into the school’s agenda (Glover et al. 1998; Midthassel and Ertesvag 2008; Woods and Wolke 2003). It has been suggested that anti-bullying policies are not adequately monitored within schools (Glover et al. 1998; Midthassel and Ertesvag 2008; Woods and Wolke 2003). In the present study, Principals were asked to report on strategies used in their schools to monitor bullying. Nearly all respondents reported at least one type of
monitoring. The types of monitoring associated with being able to give at least some kind of estimate of the prevalence of frequent bullying were the SHP survey and compiling statistics on bullying incidents.

The association of monitoring type with agreement between pupil reports and Principal estimations of the prevalence of frequent bullying was also studied. Using surveys other than the national SHP survey was associated with a more accurate Principal estimate of the prevalence of frequent bullying. Even though asking about bullying in regular health checks and meetings with teachers and parents were popular ways of monitoring bullying, they were not associated with a better agreement between pupil reports and Principal estimates of the prevalence of frequent bullying.

From the point of view of the pupils, responding to a survey may seem a safe way of reporting on bullying. When asked face to face by a teacher, with parents present, reporting may require much more courage and determination. In a face-to-face situation there may also be a danger of the bullying experiences being trivialized or not taken seriously (Oliver and Candappa 2007; Fekkes, Pijpers and Verloove-Vanhorick 2005). It may also be that schools don’t have a practice of reporting the bullying cases detected during these discussions in a way that would allow the compilation of statistics. Thus, surveys may give a more accurate picture of bullying behaviours than face-to-face interviews.

The Principals also had the opportunity to select the alternative “other methods” of monitoring as a survey response. Surprisingly, choosing this alternative was also associated with the accuracy of the Principal estimation of the prevalence of frequent bullying. In schools with only a hundred pupils or so, bullying incidents may be easily recognised by teachers, providing that the teachers are aware of the different forms of bullying. No other means may be needed to monitor pupil behaviour. Other means may also have included methods not formally considered monitoring, such as careful teacher
supervising during recess or creating an atmosphere where the solicitation of pupils' views about bullying is welcomed.

In Finland the municipalities are in charge of the organization and management of schools in their area. However, municipal instructions on monitoring were not associated with better agreement between pupil and Principal estimates of the prevalence of frequent bullying.

The results also suggest that the monitoring evidence provided by the nationally organised SHP study is not considered in the schools. The results from the national SHP survey are widely published in the media. The municipalities also have an opportunity to obtain the results regarding the schools in their area. Although Principals using the SHP survey as a monitoring method were able to give some kind of an estimation of the prevalence of frequent bullying in their school (instead of replying “I don’t know”), monitoring with the SHP survey was not associated with a better agreement of pupil and Principal estimates of the prevalence of frequent bullying. This may suggest that centralised monitoring like this is not perceived as being a relevant source of data by the school Principals. It is also possible that even if the results of the SHP survey have been obtained by the municipality, the results are not being discussed with the individual Principals.

The apparent knowledge-utilisation gap needs to be taken seriously in the future planning and implementation of the study. If the evidence is not used, the study loses one of its main functions: to provide schools with an evidence-base for the planning of a safe and healthy learning environment. The idea of information and knowledge management being vital tools in organisations has only recently been considered in school leadership. It must be realised that data is not information. Accumulation of data is influenced by the values of the school organisation; and these data will take on significance as information through processes of human interaction and information technology.
Information will become knowledge relevant to decision-making only if it is accumulated, synthesised and reflected on and given meanings in the organisation. (Petrides and Guiney 2002) Empirical evidence about the effect of managing bullying behaviours on educational effectiveness may help school stakeholders to understand the importance of fighting bullying and establishing a dynamic approach to school improvement (DASI). It has been suggested that DASI has a stronger impact on reducing bullying than other approaches to school improvement (Creemers, Kyriakides and Panayiotis 2013).

A strength of the study is the quality of the data, especially in the SHP study. The results of the SHP study can be considered representative of Finnish children in the 7th to 9th grades. The respondents are contacted through secondary schools to ensure a representative sample of the age group, since the coverage of secondary schools in Finland is more than 99 per cent. The participation rate in the School Health Promotion Study was high compared to surveys in general. A majority of dropouts were due to absence from school. Among the pupils who did not show up on the day of the survey, victimising is likely to be more common (see for example Billie 2008). Thus, including these subjects into the study would likely have increased the prevalence of frequent victimisation.

The results of the present study must be interpreted with the following limitations in mind. The response rate in the BWHS survey was, however, not as good (75%). Apart from lower response rates from two big cities, no other systematic differences were found. Attrition may have been higher among Principals where required data was difficult to access so as to respond to the BWHS survey.

Differences in the description of bullying between the pupil and Principal surveys may have affected the agreement on estimations of the prevalence of bullying. The more detailed description
should, however, have made it easier for the Principals to identify different kinds of behaviour as bullying, thus making the estimate more accurate.

Conclusion

Despite efforts to monitor bullying in schools, the Principals underestimated the prevalence of frequent bullying at their school compared to the pupil-reported prevalence. The method of monitoring bullying may affect the awareness of Principals. Nationally administered, centralised monitoring may not, however, be an adequate method of monitoring unless effectively used in school management practices. Municipalities that obtain the municipal/school-specific results of the study need to ensure that they share the results with schools. Also, more effective ways of facilitating a pathway from monitoring, to information, to knowledge of the prevalence of bullying should be explored in conjunction with school Principals.

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