# School-based interventions to address bullying

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#### Abstract

Following some background studies on the nature of school bullying, its prevalence, and the negative consequences it can have, this article reviews the history of anti-bullying interventions over the last 30 years. It considers several major programmes in detail, such as the Olweus Bullying Prevention Program, KiVa, Steps to Respect, and Friendly Schools. The nature and evaluation of the interventions is discussed, followed by a review of meta-analyses of the programmes effectiveness. Issues considered are the effect at different ages; components of interventions; work with peers; disciplinary methods, non-punitive and restorative approaches; challenges regarding cyberbullying; the role of parents; the role of teachers and teacher training; set menu versus à *la carte* approaches; sustainability of interventions and societal context. Conclusions show that interventions have had some success, with traditional bullying. However, further progress is needed in strengthening theoretical underpinnings to interventions, and in tackling cyberbullying.

Keywords: bully, victim, intervention, cyberbullying, evaluation, teachers

#### Introduction

Bullying has been a constant problem since the creation of schooling. When large numbers of children are constrained together in the same environment for some period of time, it is likely that some abuse of power may occur in relationships. This can happen, of course, in other institutions and with adults, and there is substantial literature on workplace bullying, prison bullying, and abuse in the home (Monks & Coyne, 2011).

However, the research on school bullying has been the most extensive. It began being systematically studied from the 1970s (Olweus, 1978, orig. 1973). Zych, Ortega-Ruiz and Del Rey (2015) have documented how

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research into school bullying has increased exponentially through the subsequent three or four decades. Most studies have been on topics such as measurement, types of bullying, bullying roles, prevalence, risk and protective factors, individual coping strategies, and outcomes. There have also been a substantial number of studies on school-based interventions, and more recently a number of meta-analyses of the results of these interventions. This article will review the main developments in interventions since the 1980s.

There has been some success, although perhaps only at a moderate level. Many different intervention components have been tried, and a number of programmes rigorously tested. While we have learnt quite a lot about what does or does not work and in what conditions, there are still controversial areas and many challenges that remain if we are to make interventions which are feasible, effective and sustainable.

# Background: What bullying is and the negative effects it can have

Bullying is a subset of aggressive behaviour. It is generally agreed that it refers to repeated, intentionally aggressive acts against someone who cannot easily defend themselves. Thus two defining criteria separate bullying from the more ordinary aggressive acts such as fights or quarrels, often one-off, and generally between persons relatively equally matched. The imbalance of power and repetition in bullying can make it particularly unpleasant and harmful, and provide a powerful moral imperative to take action against it (Greene, 2006).

The nature and extent of school bullying has been investigated in a number of ways (Smith, 2014). For the use of large-scale assessments, such as those normally used in assessments of interventions, the most commonly used have been anonymous self-report questionnaires. An early prototype was the Olweus Bully/Victim Questionnaire, which asks about the frequency with which someone has been bullied, or taken part in bullying others, over a specified time period (often, one school term). However, there are many other questionnaires available, especially during the last decade when cyberbullying became a common practice. Alternatives to self-report questionnaires include peer nominations, widely used on a class basis; teacher nominations, used more with younger children; interviews and focus groups; direct observations; and incident reports. Each method has its own advantages and disadvantages; self-report questionnaires are

quick and easy to administer, but some researchers question how valid they are, given issues of over-sensitivity or denial (in admitting being bullied) or social desirability (in admitting bullying others) (Cornell & Brockenbrough, 2004).

Prevalence estimates vary greatly depending on which method is used, what time reference period is asked about, and what frequency of occurrence is used as a cut-off. However it is quite clear that a minority of children are involved in bullying, wherever and whenever a study is carried out. It is a universal problem. The majority of interest has been focussed on the victims, who clearly suffer the most. In western societies, the percentage of victims generally exceeds that of the bullies. However, in some eastern countries, notably Japan and South Korea, the percentage of bullies can exceed that of victims; this appears to be due to the more group- or class-based nature of bullying in these countries, often focussing on social exclusion (Koo, Kwak, & Smith, 2008). Some children are both bullies and victims - the so-called bully/victims. They are generally a much smaller minority, but may be a particularly at-risk group. Finally, many pupils will be bystanders of one kind or another - perhaps helping or defending the victim in some way, perhaps staying outside the situation entirely, or perhaps reinforcing the bullying through laughter or just silent acquiescence (Salmivalli, 2010).

Types of bullying are varied. The most prototypical have been physical (hitting, assaulting, damaging belongings) and verbal (threats, taunts, insults). Since the 1990s we have been aware of indirect and relational forms of aggression, including bullying in the form of rumour spreading, and social exclusion. Cyberbullying, through the use of mobile phones and the internet, has come to be significant during this century. This online bullying is now often on social networking sites. There is considerable discussion as to whether cyberbullying is just another form of bullying, or is different enough to be considered a problem in its own right (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). It cannot be ignored in school; even if cyberbullying is not perpetrated within the school grounds, those involved are often in the same class, year group or school, so the issues will be present in the school and may even weave into and out of offline or 'traditional' bullying (Jang, Song, & Kim, 2014).

Finally, the harmful consequences of bullying are extensively documented. Many cross-sectional studies, as well as an increasing number of longitudinal studies, have shown how the experience of being a victim is associated with, and can lead to increases over time of, internalising problems such as low self-esteem, depression, psychosomatic complaints, and

suicidal ideation; and in extreme cases can be a major cause of suicides. Some of these effects can persist into adult life (Takizawa, Maughan, & Arseneault, 2014). Involvement in bullying is associated more with externalising symptoms, and later anti-social behaviours and criminality (Ttofi, Farrington, & Lösel, 2012). Bystanders to bullying can also be affected, especially if it is seen to be not tackled effectively. Thus, there are compelling reasons for schools to intervene, and for research to help them tackle these problems in the best ways.

#### Changes over time in prevalence rates

Media reports may give the impression that the problem of school bullying is on the increase whereas, in fact in many countries it appears to be on the decline. Rigby and Smith (2011) drew on empirical studies describing prevalence at different points in time between 1990 and 2009, and Chester *et al.* (2015) reported trends from Health Behaviour of School-aged Children (HBSC) surveys from 2001/02, 2005/06 and 2009/10. These surveys provide good evidence to show that in many countries the incidence of bullying has fallen in the last decade or so. It is arguable that increased awareness and implementation of anti-bullying interventions has helped produce this decline. However, to date, the evidence for the decline mainly applies to traditional bullying. There is little evidence for a decline in cyberbullying, and indeed a follow-up survey by EU Kids Online in 7 countries from 2010 to 2013 suggested a rise in cyberbullying, especially among girls (Hasebrink, 2014).

## Intervention strategies and programmes – a brief history

The systematic history of anti-bullying interventions started in Norway. Following research by Olweus (1978) and others, and triggered by the suicides of three boys in late 1982, caused in a large part by school bullying, a nationwide anti-bullying campaign was initiated in Norway in autumn 1983. This included a pupil-based survey to assess the nature and extent of the problems in each school; a booklet for school personnel; a video showing episodes of bullying as a basis for class discussion; and a folder with information and advice for parents. As part of the nationwide campaign, Olweus carried out a large-scale intervention project in Bergen, and developed a first version of the Olweus Bullying Prevention Program (OBPP). This developed into having school-level components (Bullying

Prevention Coordinating Committee, introducing school rules against bullying, carrying out a questionnaire survey), classroom-level components (class meetings and meetings with parents), individual-level components (serious talks and intervention plans for involved students), and community-level components (supportive partnerships with community members). As described in full in Olweus and Limber (2010), the overall philosophy is for adults to act as responsible and authoritative role models; to be warm and supportive to students, but set strong limits on unacceptable behaviour such as bullying; and to consistently use non-physical, non-hostile negative consequences when rules are broken.

In his First Bergen Project (1983-85), Olweus carried out an evaluation of the programme in 42 primary and junior high schools, with some 2,500 students. He reported victim rates falling by around 50% for both boys and girls; and that greater teacher involvement in the programme, and its implementation, correlated substantially with these reductions in levels of those being bullied. This work was inspirational for a next generation of researchers, and in the next few years further interventions were carried out and evaluated in England, Canada, and Belgium (Flanders). These were in part based on the OBPP model, but also used other components. Since then, many further intervention efforts have taken place in many countries. The success of the OBPP has been replicated in Norway several times; but its success rate in other countries has been limited (Olweus & Limber, 2010; Smith, 2014).

Another very influential programme in Europe has been KiVa, which was developed by Salmivalli and colleagues in Finland around 2006 (Salmivalli & Poskiparta, 2012). KiVa includes universal interventions and targeted interventions. The universal actions involve student lessons (primary school) and theme days (secondary school), involving discussion, video films, and exercises done in dyads or small groups. Pupils also use an anti-bullying virtual learning environment (a computer game for primary school students, and an Internet forum (for secondary school students), closely connected to the topics of the student lessons and themes. Each level of the KiVa computer game includes three modules: I Know (students are presented with facts about bullying), I Can (students practice the skills they have learnt), and *I do* (encourages students to transfer their knowledge and skills acquired in the virtual environment, into real life interactions with their peers). The targeted interventions utilise school-based KiVa teams of three adults who deal with incidents referred to them. In addition, the classroom teacher meets with selected high-status classmates of the victimised children, asking them to provide support for these peers; the reasoning

here is that high-status peers can have much more influence and impact as defenders, than those with a lower status.

A randomised control trial evaluation was carried out in 2007–2008, with considerable success, and subsequently KiVa has been introduced throughout Finland, reaching 90% of all comprehensive schools by 2011. A further evaluation of KiVa was reported by Kärnä, Voeten, Little, Poskiparta, Alanen, and Salmivalli (2011) over the academic year 2009–2010, on a large sample of schools nationally. Generally, the KiVa programme reduced bully and victim rates significantly, although somewhat less than in the earlier RCT evaluation; possibly because the RCT trial attracted more motivated schools than in the larger national sample.

Many programmes have been designed in the USA. One well-known programme is Steps to Respect, developed for children in Grades 3 to 6. Besides school-wide policies and procedures and emphasising staff training, it has a social-emotional skills curriculum to help students develop empathy, emotion regulation, conflict resolution skills, positive and supportive peer relationships, and change attitudes towards bullying. An evaluation by Frey *et al.* (2005) compared intervention and control schools. They reported some positive findings, including less acceptance of bullying and greater reported bystander responsibility in intervention schools, although no significant changes in self reports of being a victim or bully. A later evaluation by Brown, Low, Smith, and Haggerty (2011) on a larger sample of schools also found greater improvements in intervention schools for measures such as school climate, and also teacher-reported physical bullying, although again no significant changes in pupil-reported levels of victimisation or bullying perpetration.

In Australia, an example of an intervention programme is the Friendly Schools initiative for primary schools. This also is a whole school approach, focusing on curriculum work to build social skills such as conflict resolution, empathy, pro-social skills, and peer discouragement of bullying. It also includes family involvement, for example through newsletters sent to parents. A comparison of intervention and control schools by Cross *et al.* (2011b) found some positive outcomes, including fewer reported observations of bullying behaviours, and self-reports of being a victim; although not in self-reports of bullying perpetration.

Many other programmes have been used in other European countries, in Australia, New Zealand, the USA, and Canada. For example 24 programmes (with their components) are listed in Evans, Fraser and Cotter (2014). For further descriptions see Smith and his colleagues (2016). Work has also been carried out in eastern countries, notably Japan (Kanetsuna &

Toda, 2016) South Korea (Kwak, 2016), and Hong Kong (Lin & Lai, 2016), with some work in mainland China (Zhang, 2016). Relatively little of this work in eastern countries has been published in English language outlets.

Some components of these various programmes will be discussed later. The more recent intervention efforts have also had to grapple with the problems of cyberbullying, which have become prominent in the last decade, and this will also be considered below.

## Design and evaluation of intervention studies

The best design for evaluating programmes is generally considered to be the randomised control trial (RCT). Here schools or classes are assigned randomly to intervention or control. The first KiVa evaluation (see above) used such a design. An advantage of an RCT is that it largely removes other alternative explanations for differences found. A possible disadvantage is that requiring schools or classes to follow certain procedures that they might not have otherwise chosen, can be unnatural. It is also not always easy to randomise in this way, and many studies use intervention and control schools or classes selected in a non-random way. There are ethical issues involved too in withholding intervention, sometimes managed by offering or providing the intervention to the control classes later.

Sometimes control schools are not feasible, particularly if there is a national initiative or anti-bullying campaign. This was the case with the First Bergen Project in Norway, and with the later KiVa evaluations (see above). However, just measuring changes over time in the intervention schools is unsatisfactory as there is a natural age-related decrease in victim rates (Smith, Madsen, & Moody, 1999). To avoid this confound between age and intervention effects, Olweus made use of what he calls an 'extended selection cohorts' design. This uses time-lagged contrasts between age-equivalent groups; for example, children who were in grade 4 at time 1, and moved into grade 5 at time 2, had now experienced one year of intervention; they could be compared with those who had been at grade 5 at time 1, before the intervention started. This design has been used in several other studies where control schools were not feasible or unavailable.

Another common procedure has been to examine the 'dosage-response' relationship. Schools or classes in an intervention typically vary greatly, depending on how much or how well the programme is implemented, or the programmes integrity. If this variation is assessed, and the outcome correlated further evidence of the effectiveness of the intervention can be obtained.

Ryan and Smith (2009) discussed a range of issues around evaluating anti-bullying programmes. Besides design, and programme integrity, they considered issues concerning measurement and outcomes. They made a number of recommendations, including the use of multiple assessment measures (for example, behaviours and attitudes); multiple informants (for example self, peer, teacher); collecting follow-up data to assess sustainability; using qualitative data to contextualise quantitative findings; and using multi-level statistical modeling for quantitative analyses. Most studies fall short of these ideals in a number of respects. Chalamandaris and Piette (2015) reviewed 62 anti-bullying intervention reports (30 from Europe, 27 from North America, 5 from Australia), and tabulated in detail the range of design features and methodologies used.

#### Meta-analyses of the success of anti-bullying interventions

By the early 2000s enough interventions had been reported and evaluated to make it possible to carry out meta-analyses of their success. Following some earlier publications, a very thorough analysis was reported by Ttofi and Farrington (2011). They analysed 44 high-quality school-based intervention programmes and found that on average, these reduced bullying by around 20-23% and victimisation by around 17-20%. They also examined which programme components and design features were most associated with its success.

Subsequent to the Ttofi and Farrington review, further meta-analyses have been reported. Evans, Fraser and Cotter (2014) reviewed intervention evaluations published between 2009 and 2013. They found 32 studies evaluating 24 interventions. Of these, 27 assessed being a victim, and 18 reported significant effects; 22 assessed being a perpetrator of bullying, and 11 reported significant effects. Programmes implemented in the USA tended to be less successful than those implemented elsewhere (Australia, Canada, Finland, Germany, Turkey, and the U.K.).

Two further reviews selected only RCT (randomized control trial) evaluations. In one, Cantone *et al.* (2015) found 17 such studies between 2000 and 2013; 8 in the USA, 3 in Australia, 3 in Finland (all of KiVa) and 1 each in Belgium, the Netherlands, and Switzerland. Of these, 12 were only in primary school settings. No statistical meta-analysis of effect sizes was calculated, but the authors concluded that "about 80% of the studies reported improvements in the experimental group in at least one of the main components, which reported victimisation commitment, bullying

acts, or observers' attitude" (p.74). In the other review, Jiménez-Barbero *et al.* (2016) selected studies on bullying or school violence from 2000 to mid-2015. Of the 14 studies, carried out, 7 were from the USA, 2 from Australia, 2 from Finland, and 1 each from Belgium, the Netherlands and Spain. They used standardised mean differences as a measure of effect size. For perpetrating bullying this was -0.12 (a small reduction, based on all 14 studies); for being a victim of bullying, it was -0.09 (based on 8 studies); for reducing attitudes favourable to bullying it was -0.18 (based on 3 studies); for improving attitudes against bullying it was 0.06 (based on 4 studies). These were all positive findings, but for the school climate, based on only 3 studies, the effect was very slightly negative, -0.03.

To summarise, there has been some degree of success achieved by antibullying interventions in schools, although much of the work has been in primary schools. There has also been a discussion of success at different ages; and the effectiveness of various intervention components.

## Success of interventions at different ages

Examining design features of interventions, Ttofi and Farrington (2011) argued that "Programs should be targeted on children aged 14 years or older rather than on younger children" (p.46). This conclusion was based on 'across-programme' comparisons. Smith, Salmivalli and Cowie (2012) pointed out that more reliable conclusions could be drawn from 'withinprogramme' comparisons, where most other features remain constant. On this basis, both the OBPP and the KiVa programmes found greater success with students at primary school and less success by mid-adolescence. This issue was examined in depth by Yeager, Fong, Lee and Espelage (2015). Looking at within-study effects, they located 19 relevant studies and found that up to grade 7, programmes were generally effective; but that in 8<sup>th</sup> grade and beyond they had little if any effect. Despite a few individual successes (see later), it does appear to be a considerably greater challenge to reduce bullying among mid-adolescent school pupils. Around this age, adolescents are very concerned with their status in the peer group; bullying can be associated with popularity and status, and attitudes to victims tend to be most negative around 14-15 years (Rigby, 1997). Adolescents are also more resistant to exhortations from teachers than are younger children. Organisational factors in large secondary or high schools may also make it more difficult for interventions to be effective.

### **Components of intervention programmes**

Ttofi and Farrington (2011) recorded the presence or absence of various components in the 44 interventions they examined, and correlated this with the amount of decrease (or increase) in rates of bullying, and being bullied. The successful elements for reducing rates of both bullying others and being bullied, were parent training/meetings, disciplinary methods, and cooperative group work; and greater duration and intensity of the programme, both for teachers and children. In addition, the rate of bullying was reduced more in programmes with improved playground supervision, classroom management, teacher training, classroom rules, whole-school policy, and school conferences. Victim rates were reduced more in programmes where videos were used. Victim rates had no effect related to working with peers.

This procedure was the first of its kind, but (as with the age of pupil comparisons above) suffers from the weaknesses of correlation designs; programmes vary in many aspects, and an association of one element or feature with bullying or victim rates may actually occur due to the variation caused by other elements. In addition, such analyses will be limited historically in that the interventions that Ttofi and Farrington surveyed covered some 25 years, whereas methods of intervention have and still are being developed and changed. In fact the subsequent review of more recent studies by Evans *et al.* (2014) did not replicate the findings of components reported by Ttofi and Farrington (2011).

Nevertheless, some policy recommendations were made by Ttofi and Farrington in the light of their analyses, stating that "New anti-bullying initiatives should ... be modified in light of the key program elements that we have found to be most effective (or ineffective)" (p.44). Two features picked up in the critique by Smith *et al.* (2012) were the findings on work with peers, and disciplinary methods (see also reply by Ttofi and Farrington, 2012). Much depends on how terms such as 'work with peers' and 'disciplinary methods' are interpreted.

## **Work with peers**

Peer support schemes have increased rapidly in popularity and many schools now use some version of them. For example in England, Houlston, Smith and Jessel (2009) estimated that 62% of schools were using a structured peer support scheme by 2007. Some pupils are trained as peer supporters, and with appropriate supervision, they run schemes designed to improve student well-being and reduce bullying. In primary schools, these

are often befriending schemes at break or recess times, or playground pals leading structured games activities. In secondary schools, mentoring or counselling of younger students by older ones is used.

Ttofi and Farrington (2011) argued that "it seems from our results that work with peers should not be used" (p.44). There are certainly some problematic issues around peer support schemes, discussed in detail by Cowie and Smith (2010). Their effectiveness depends very much on the type of scheme used, how it is supported, and many other factors. Some schemes have not been successful and might even be counter-productive. However peer support schemes are developing, schools are learning from past experience, and new methods are evolving. The KiVa project uses peer support successfully.

Another successful peer support scheme was reported by Menesini, Nocentini and Palladino (2012), based on two studies on a web-based project called *Noncadiamointrappola* (Let's not fall into a trap). Initially, students developed a website to promote peer-to-peer content against bullying and cyberbullying. An evaluation at 8 high schools found that cyberbullying others decreased significantly (especially for boys), for those in the programme. Next, bystanders and teachers were more involved, and a Facebook page integrated onto the web forum. An evaluation in 4 high schools found significant reductions in traditional bullying and victim rates, and cyber victim rates, for the experimental group, compared to some increases in the control group; although there was no effect on cyberbullying perpetration.

## **Disciplinary methods**

There is a continuing controversy regarding the most effective ways to deal with perpetrators of bullying when an incident occurs. Should they incur some negative sanction as a discipline? This is often advocated, and if someone infringes an agreed whole-school policy on bullying, it would seem logical that some disciplinary punishment should follow. On the other hand some psychologists and educators coming from a more counseling based approach have argued that negative sanctions are likely to be counterproductive; they may make bullying perpetrators even more resentful of the school and of the anti-bullying values being promoted. The different approaches are well summarised in Rigby (2010). A survey of 625 Austrian and German teachers found that very few said they would ignore a bullying incident. The most supported actions were authority-based (disciplinary)

interventions, but this was followed by non-punitive work with bullies (especially among female teachers). Other strategies were contacting other adults (administrator, parents), and encouraging the victim to be more assertive (Burger, Strohmeier, Spröber, Bauman, & Rigby, 2015).

Information on the relative success of these kinds of approaches comes from analyses of actual outcomes from incident reports. In one report, analysing 339 cases, Garandeau, Poskiparta and Salmivalli (2014) compared 'Confronting' and 'Non-confronting' approaches used in different schools within the KiVa programme in Finland. There was no overall difference in the success level, although 'Confronting' was somewhat more successful in secondary schools and for short-term victimisation, while 'Nonconfronting' was somewhat more successful in primary schools, and for longer-term victimisation. In another report, Thompson and Smith (2011; see also Smith, 2014) analysed 285 reports from schools in England; direct sanctions were somewhat less effective than support group (non-punitive) methods, especially for relational bullying; The difference in success rates was less for secondary than primary schools; and for cyberbullying (but not other types of bullying), direct sanctions were the most effective. This study also evaluated the success of restorative approaches, which was also high, especially in secondary schools and with physical and verbal bullying.

# Restorative approaches

While direct punishment can perhaps be counter-productive in some circumstance, non-punitive approaches are open to the accusation that despite the school having an anti-bullying policy or ethos, bullies can behave the way they do without incurring any clear negative consequences. Restorative approaches can provide a path between these two opposite approaches. The underlying principle here is to resolve conflict and repair harm by focusing on the perpetrator, who is made aware of the victim's feelings, encouraged to acknowledge the impact of what they have done and given an opportunity to make reparation; those who have suffered have the opportunity to have their harm or loss acknowledged and amends made. Although the bullying child is held responsible for their actions, the emphasis is less on 'you have broken the school rules and this must stop', and more on '(victim) has felt hurt by what you have done; what can you do to help make things better?'

Use of restorative approaches in schools has grown rapidly in recent years (Thompson & Smith, 2011). An example of an evaluation of its use in schools in Hong Kong was provided by Wong, Cheng, Ngan and Ma (2011).

Compared to a control school, an intervention school using a restorative approach showed a significant reduction in bullying and higher empathic attitudes and self-esteem; two schools that partially used restorative methods had intermediate results.

### **Challenges of cyberbullying**

Cyberbullying has emerged as another major form of bullying this century. It has its own characteristics, often including greater anonymity of the perpetrator, and a much greater audience for the attacks. Unlike offline bullying, there is no respite from cyberbullying when the victim is away from school. Indeed there may actually be less cyberbullying initiated in school, due to restrictions on mobile phone and internet use. Nevertheless, much cyberbullying involves classmates or those in the same school, therefore, it remains a school-based problem. The forms of cyberbullying also change rapidly with new technological advances. Paul, Smith and Blumberg (2012) described how Quality Circles can be used in schools to obtain information about cyberbullying issues directly from pupils as well as get their own ideas for dealing with the problem.

There is a considerable overlap of involvement in offline and online bullying (Kowalski *et al.*, 2014), and interventions to reduce bullying generally, even if focused mainly on traditional bullying, might be relevant for cyberbullying as well. For example, curriculum work to include empathic awareness, conflict resolution, pro-social behaviour, might be expected to impact on cyberbullying. The evidence from the KiVa intervention in Finland is that reductions were just as substantial for cyberbullying as for traditional bullying (Salmivalli, Kärnä, & Poskiparta, 2011). Also, school policies, and raising awareness of staff and parents, needs to explicitly include cyberbullying. Nevertheless, more specific interventions relevant to cyberbullying are likely to be important as well.

Useful reviews of resources and prevention and intervention strategies for cyberbullying are provided by Notar, Padgett and Roden (2013) and Ang (2015). In the context of adolescent cyberbullying especially, Ang (2015) discusses both general empathy training and modifying beliefs supportive of aggression, and more specific guidelines for internet behaviour. More generally, guidance on cyberbullying, and Internet safety is being developed in many countries, and there are many sources that offer advice to children young people, parents, and schools. These cover actions young people can take themselves (such as reporting abuse, keeping evidence), information

on legal rights and recourse, and information on websites and on schemes such as cybermentors.

An example of such a programme, called Media Heroes, was evaluated by Schultze-Krumbholz, Schultze, Zagorscak, Wölfer and Scheithauer (2015). The programme included specific elements on cyberbullying (such as consequences, legal background), as well as more general social skills and empathy training. The longer version of ten sessions was found to be more effective in reducing cyberbullying perpetration, and increasing affective empathy, than the shorter four session version.

In the Netherlands, Jacobs, Völlink, Dehue and Lechner (2014) have developed a web-based intervention called Online Pestkoppenstoppen (pesten is the Dutch word for bullying). This is designed for cybervictims aged 12-15 years, and consists of three web-based advice sessions delivered over three months. The sessions cover rational problem solving, coping strategies, and internet safety. It is described as a tailored intervention, as the participants first fill in questionnaires on aspects such as personality and favoured coping strategies, with the advice sessions being adjusted correspondingly.

In Australia, the Friendly Schools approach (see earlier) has been expanded to Cyber Friendly Schools (Cross *et al.*, 2015). This operates at individual, family, peer, online and community levels. To date, its evaluation has reported a reduction in adolescent involvement in cyberbullying after 18 months of intervention; although this was no longer maintained 12 months after the intervention had ended.

A review of 13 intervention models using ICTs is provided by Nocentini, Zambuto and Menesini (2015). Many of these models target both traditional and cyberbullying. However, only four programmes were found to provide any effective evidence of reducing bullying.

## The role of parents

There is considerable research showing how family relationships, and particularly parent-child as well as sibling relationships, affect the likelihood of being involved in bullying or victim roles (Smith, 2014). For example, parental use of punitive discipline (physical punishment and psychological aggression) has been found to predict their child's bullying involvement in school (Gómez-Ortiz, Romera, & Orega-Ruiz, 2016). However, parents can also have an important role in working with schools, supporting anti-bullying initiatives, and liaising with schools if they have concerns

about a child's behaviour. In turn, schools can involve parents, usually through information in newsletters or booklets, and/or parent-teacher meetings. Axford *et al.* (2015) review issues concerning the importance of involving parents in anti-bullying work.

In the context of cyberbullying, Ang (2015) describes the importance of developing strong and positive parent-adolescent bonds. Parents have a particular role in cyberbullying as regards knowing about and advising on their child's internet use. The evidence suggests that this is best done by concerned involvement but without being overly restrictive (Sasson & Mesch, 2014).

#### The role of teachers, and teacher training

Teachers are in the front line in terms of implementing school policies on bullying and dealing with incidents if they occur. Analysis of school and classroom differences within the KiVa project showed that the general pupil perception of a home-room teacher's attitude to bullying was a significant predictor of levels of victimisation (Saarento, Kärnä, Hodges, & Salmivalli, 2013). Looking at predictors of implementation of the Olweus Bullying Prevention Program, Olweus (2004) found the most important school-level predictors to be Openness in Communication (among teachers) and School Attention to Bullying Problems; and the most important class-level predictors to be Perceived Staff Importance (of bullying), and Read Program Information (by teachers). This and other evidence highlights the importance of teachers to carry out programme implementation.

Many programmes (such as KiVa and OBPP) include some specific training of teachers as part of the package. However, despite the advances in knowledge that we have gained in understanding school bullying and violence, the application of this to teacher training courses generally is very inadequate. More effort needs to be made at national levels to help teachers, and trainee teachers, who would often welcome such assistance (Cross *et al.*, 2011a).

# The nature of intervention programmes: A set menu or a la carte?

The well-established anti-bullying programmes, such as OBPP, KiVa, Steps to Respect, Friendly Schools, and a number of others, have a well-defined set of components to use, operating at various levels (e.g. whole-school,

class, individual). Some actions are preventative, or proactive, laying a foundation of respect in interpersonal relationships. Some are more reactive, being ways to respond when bullying happens. Both proactive and reactive strategies are needed in any comprehensive approach.

These 'set menu' approaches can be contrasted with an 'a la carte' approach, in which schools choose from a range of components, selecting those that they feel most appropriate to their situation. For example, this has been the dominant philosophy in England, where government-sponsored information packs give teachers descriptions of various components, without being prescriptive about which combination should be used (Smith, 1999). This might have the advantage that schools feel more responsibility for their anti-bullying actions, and may choose components most suitable to their needs and philosophy, rather than being asked to fit into a pre-existing framework. On the other hand, programmes such as OBPP and KiVa have had repeated success, suggesting that they do make a successful package to use.

The divergence between these two approaches can be over-stated. Schools, and teachers, tend to adapt programmes that are presented to them. A study carried out with 39 Swedish schools by Flygare *et al.* (2011) aimed to compare the success of eight anti-bullying programmes. A notable finding was that all the schools supposedly using one particular programme, actually used components from more than one programme; this was even the case with the eight selected non-intervention 'controls' schools! Thus the focus of their evaluation changed from comparing programmes, to comparing programme components.

# Sustainability of interventions and societal context

Beyond the actual programme components, there is a need to consider the wider societal context in which programmes take place. An intervention or campaign, even a national one such as that in Norway, may have immediate positive effects, but it is of limited value to have an intervention project that produces quite good results for a short period, only for things to slip back once that project is finished. To produce long-term sustainable change, it is helpful to have national organisations that maintain awareness of the issue, provide resources, and keep pressure up on governments to support anti-bullying work. Examples are PrevNet, in Canada (Pepler & Craig, 2011), focused on knowledge mobilization, conferences and publications; the Anti-Bullying Alliance (www.anti-bullyingalliance.org.uk) in England, which brings together over 50 national organisations and has supported

the development of a portfolio of resources, and anti-bullying weeks held annually; and the National Safe Schools Framework (NSSF) in Australia (Cross, *et al.*, 2011a), which encourages sharing of information, resources and successful practices, and encourages schools to adopt whole-school programmes.

Costs will be a factor when implementing interventions on a wider scale. However, successful programmes can reduce mental health costs and benefit educational achievement and later productivity. A few publications have started to examine the cost-effectiveness of anti-bullying programmes. Beckman and Svensson (2015) examined the cost-effectiveness of the OBPP, in terms of what tax increases people would be prepared to accept, in order to implement such a programme in their local schools. On this basis, they concluded that it was a cost-effective intervention. Another approach might be to estimate costs of the damage done to victims (for example extra mental health provision, reduced earnings).

Looking beyond schools, factors such as violence on the media, and levels of violence in communities, have been shown to be related to levels of bullying, at least at a correlational level (Smith, 2014). Some issues are more political and very long-term. Using HBSC cross-national data, Elgar, Craig, Boyce, Morgan and Vella-Zarb (2009) found an appreciable correlation across countries between high levels of income inequality and rates of bullying others.

#### **Conclusions**

School-based anti-bullying interventions, developed over the last 30 years, are having some success. But they could potentially have a lot more. There is often less success with older children. Also, there are new challenges in dealing with the ever-changing landscape of cyberbullying.

Hawley and Williford (2015) discussed the theoretical underpinning of anti-bullying interventions. Using the Theory of Planned Behaviour, they argue that successful intervention requires changes in perceptions (for example, the nature of bullying), attitudes (about bullying behaviour and towards victims; reporting bullying and intervening), subjective norms (how do others think or expect I should behave?), and efficacy beliefs (feeling confident that actions such as reporting or defending will be successful and not result in negative consequences). All these would be necessary for changing actual behaviours. Invoking ideas from organisational science, they argue that it is necessary to target these with pupils, teachers, and other staff in the school or relevant to the school (such as

school bus drivers). All this would be necessary if changes in the school culture (assumptions, values, and beliefs) are to match up with changes in the school climate (actual behavioural changes in, for example, bullying and victim rates). They identify the role of powerful individuals in influencing change. This can be school management, but also popular or high status pupils (as are targeted in KiVa).

There are important successes to celebrate in tackling bullying, and some setbacks to learn from. Progress, although modest, is showing encouraging results. We are very aware that one generation of work is a comparatively short period of time when seeking to change quite deep-rooted behavioural patterns of abusing power in pupil (and sometimes teacher) relationships. Progress is being made in a number of areas. New varieties of intervention components are being designed. More attention is being paid to the theoretical background. And more sophisticated research designs are being utilised, including more RCT trials. It may take another generation of work for further substantial progress to be made; and bullying is unlikely to be an issue that we can ever eliminate. Nevertheless this is an area where social science research is having a positive impact on pupil happiness and wellbeing.

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